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This magazine is dedicated to the interpretation, in authentic and popular form, with extensive illustration, of geography in its widest sense, first of Canada, then of the rest of the British Commonwealth, and other parts of the world in which Canada has special interest.

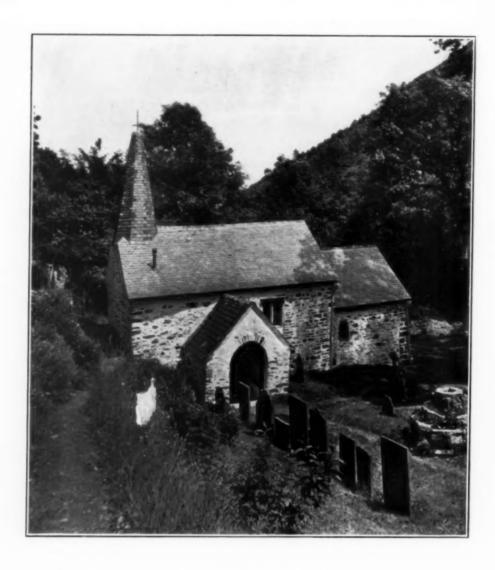
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Culbone near Porlock, Somerset. This charming little church, the smallest in England, is situated near the bottom of a lovely wooded combe running down into the Bristol Channel. In the centre of the churchyard are the remains of the old cross. St. Culbone crossed over the Channel from Wales in the 6th Century and the walls of the church are undoubtedly of Early Saxon times. It is difficult to imagine anything more absolutely akin to its fascinating surroundings than is this little church.

Canadian Geographical Journal

Parish Churches of Rural England

By PHILIP J. TURNER

F all countries in Europe, England is the most remarkable, and stands first, in all Christendom, for the number, antiquity, beauty and

variety of its parish churches. They are in fact England's finest and most characteristic contribution

to mediaeval art.

Those who visit England for short tours, and others whose purpose it is to study the best examples of Church architecture of the Middle Ages, will naturally visit the cathedrals and well-known large abbey, collegiate and city churches. In the building of these the craftsman was given every opportunity to rise to the height of his genius. But in studying such buildings, the average person is apt to overlook, to his loss, the fascinating and profitable study of the many beautiful village churches, which have a human story all their own, and tell of the lives and customs of the people who created them.

The typical village that has not been spoilt by the modern invasion of the

motor and all that is associated with it, has a charm and a quality difficult to Many of the villages have existed since the days of Doomsday, and some look as though they had changed but little in appearance since that time.

As a rule there will not be found about the buildings any harsh contrasts with their natural surroundings. They are

grouped together to form one harmonious whole, a peculiar fitness of things being apparent everywhere, and one feels as though the little cottages, the

village green, squire's hall, with the church forming the centre of the picture, had unconsciously grown up with the trees and surroundings of nature, so happily and naturally do they fit in with the general landscape.

Together they give exsion to what was in gone by the life of a little local community, complete in itself, set apart from the rush of city life, little influenced by, and having no contact with, the outside world.

The village community, being almost entirely selfsupporting, had to provide for the support of its inhabitants and also to furnish a quota of able-bodied men for the service of the

The village in the social life of England was not expected either to export or import large quantities of manufactures or produce, though from time to

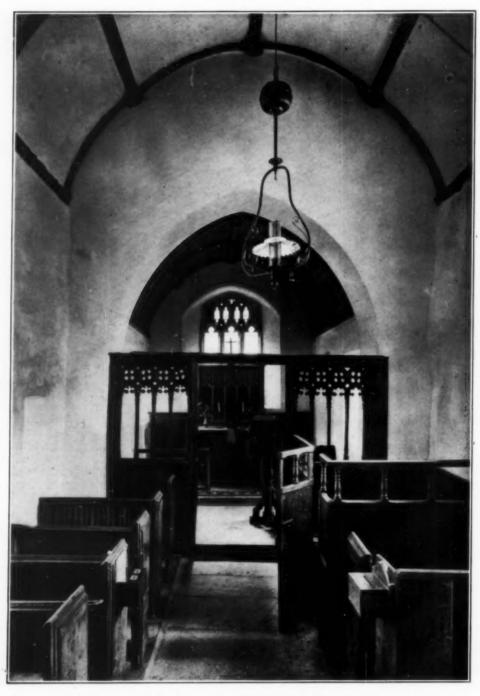
time the merchants' trains of packhorses would collect the goods made by the cottages or the local cut of wool, and traffic in their place the manufactures of other places.

But the roads were invariably bad and as a rule mere tracks through the long stretches of moorland or forest which separated the villages. In such



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of Canada.



Interior of Culbone Church, Somerset. The church is 35 feet long with a width of 10 feet in the chancel and 12 feet 8 inches in the nave. It has seats for 24, the population of the parish consisting of 30 people. The original rood screen is of the late 14th Century. The squire's box-pew is seen on the right.

conditions the inhabitants rarely travelled far from their self-contained little communities, nevertheless they required the essentials of commercial life, and the most important of these was the village church.

The whole of England is dotted with villages and each has its own church. It may be said that no two are alike, and the fact that they are so different

adds to their interest.

Village life in France in the Middle Ages was very different from that in England. The French churches for the most part had stone-vaulted roofs and there is little in design to distinguish them from the cathedrals, whereas in England nearly all the churches have open timber roofs. Simplicity is also the key-note of the English village church, which rarely attains the stage of being a miniature cathedral. In

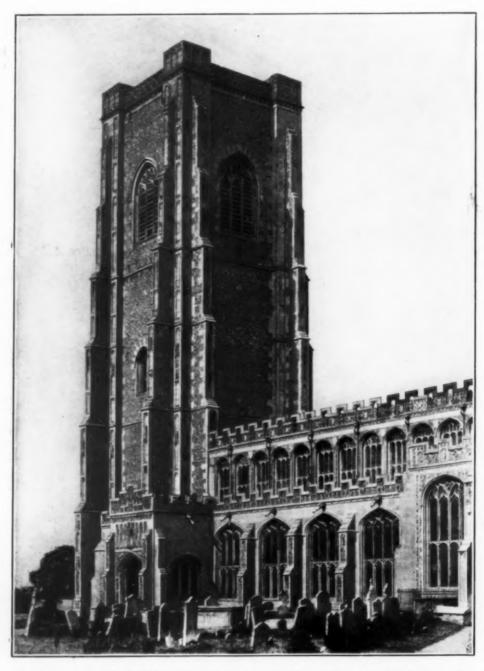


Swimbridge near Barnstaple, Devonshire. This is a good example of a west country church retaining most of its fittings. The magnificent rood screen with its "squints" on each side is continued across the aisles. The lofty Jacobean font-cover on the right makes it possible to open the sides like a triptych when access to the font is desired. The circular form of the roof is characteristic of the district.

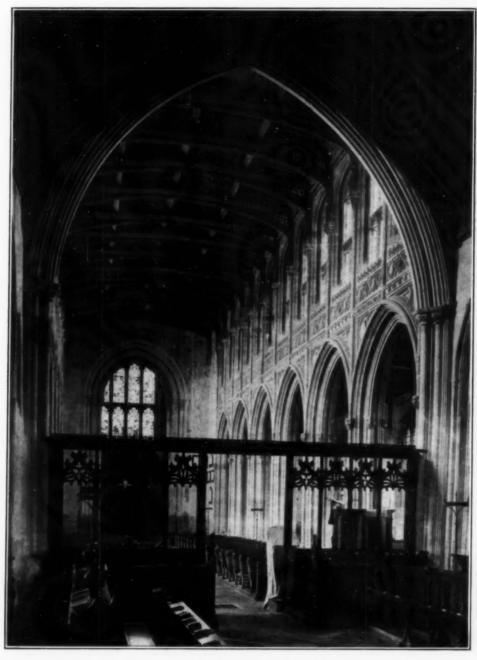
The frequency with which these churches appear in certain districts is astounding, it being estimated at the present time that there are in England 16,630 parishes, and in these 12,280 churches are of ancient origin. This large number may be in part due to England's insular position which helped to protect the people from the ever-constant fear of frays from neighbouring states—a condition of things which so often existed on the European continent and kept that part of the world in a continuous state of unrest.

France it was customary for the village folk to worship at the various chapels that lined the naves of their Cathedrals. But such a plan never appealed to the Englishman. He liked more privacy in his worship and to have his church right in his community, a church, too, that he could call his own, which he shared with a select few, and with a priest whom he could regard as his priest.

English parish churches are of all sizes and shapes, sometimes great and splendid, and at other times diminutive and



Lavenham Church, Suffolk. The finest tower in the country, 141 feet high by 42 feet wide. From its appearance at the top is was apparently never completed, owing probably to the suppression of the Monasteries and Chantries. A good example of the local use of flintwork. The church was built between the years 1480-1530 by John de Vere, Earl of Oxford, and the Spring family, who were wealthy clothiers. Coats-of-arms of both families form part of the rich decoration of the exterior.



Lavenham Church, interior. The nave 96 feet in length by 25 feet 9 inches wide, is a grand one of perfect proportions. The pier shafts are adorned with Tudor flowers. The roof is a good example of the arch-braced tie beam roof and was formerly painted. The oak screen (1340) is of earlier date than the nave (1480-1530). Lavenham was the centre of the woollen industry in the 15th Century, and the village with its church and guild hall is one of the most interesting in England.



The exterior of Long Melford Church, Suffolk, is richly ornamented with stone and flints of all shades, black, grey and orange. The long nave without large windows is characteristic of the best East Anglia churches. The church is of late perpendicular work (1450) and exclusive of the east chapels is 180 feet long. With these chapels built about 1496, the building has about 100 large windows. The tower is modern, replacing the original one which was destroyed by lightning in the 18th Century.

lovely. The smallest, at Culbone, can seat only 24 persons, while there are large parish churches with their many chantry chapels and aisles accommoda-

ting more than 1,000.

Where many and large parish churches are to be found, it is natural to conclude that, at the period at which they were built, the people were prosperous and happy, for it was the people who built them. The bishops were too busy building their cathedrals, and the abbots—those aristocratic bodies—certainly did not erect parish churches for they were too much occupied with their monastic establishments.

There are three definite periods in English history which influenced and created great activity in church building. First there is the Norman. Though the work of this period is to be seen principally after the Conquest, in 1066, it had already exerted its influence during the reign of Edward the Confessor.

Secondly, with the signing of Magna Charta in 1215, and the birth of a new English spirit, there was developed a new architectural expression, and a great movement took place, especially during the years 1200-1225.

The next epoch-making event was the "Black Death," (1349-50). As Rev. C. W. Budden says in his book on "English Gothic Churches," "The results of this calamity were far-reaching and have not been sufficiently appreciated. We have in the 'Black Death' an example of the teaching of history that a social crisis precipitates the gradual march of events and converts evolution into revolution" . . . As a result of the 'Black Death,' "wealth changed hands and there grew up a 'new rich' The end of the manorial system was hastened . . . The voice of labour asserted itself . . . The burgess grew in power." The monastic orders lost their influence and prestige with the people, and church building henceforth was mainly parochial and passed into the hands of the laity. An enormous number of churches were remodelled, added to and in places rebuilt in the 15th Century. During the 200 years following



The Church of St. Edmund, Southwold, Suffolk, was erected in 1460 on the site of an earlier one which was destroyed by fire. Interesting as one of few buildings completed all at one time. The tower windows are unusual. A good example of East Anglian flint and cut stone work. Continuous roof over nave and chancel characteristic of late work. South porch very elaborate. Note black and white checker work on west wall of tower and porch.

the "Black Death", hardly a church remained untouched, while more than 1,100 were practically rebuilt.

The Confiscation of the Chantry Endowments, together with the coming of the Renaissance, and the political circumstances associated with it, suddenly and dramatically put a stop to all church building.

When it was resumed, a hundred years later, it was in a half-hearted way, and in an entirely different style, a style foreign to the English soil. The gothic spirit of the craftsmen, in the meantime, had died through atrophy.

The division of the country into parishes originated with the manorial system and was fairly complete by the 10th Century under Anglo-Saxon rule, but it did not assume its complete form until the 12th Century.

At the time of the Conquest, England was divided into a number of small manors and tenures.

The parish priest at first was probably only a private chaplain. It was his duty to serve not only the lord of the manor, but also his tenants and retainers. At the end of the 11th Century he acquired the position of an ecclesiastical freeholder. From the earliest times he was appointed by the patron, but his office and spiritual faculties he received at the hands of the bishop.

The parish was a district within a reasonable distance of a church, that could be served by a duly-appointed priest; its bounds being laid down by the bishop and not by a manorial lord.

Parish churches in country districts were centres in the Middle Ages, not only for the daily religious devotion, for which they were consecrated, but also for various phases of English community life that seem strange to those living in

the 20th Century.

To a great extent they filled the place supplied to-day by the parish hall and church club rooms, and they were regarded with pride and affection by all

classes of the community.

It was because their lives were so closely related to the church in everything, that, in the Middle Ages, the people gave of their best, both in craftsmanship and money. Many of these churches are today veritable museums of the best work of the village craftsman of those days, in spite of the fact that so much was destroyed by the iconoclasts of the 16th Century or spoilt by overzealous restorers of the 19th Century. In outlying villages, far off the beaten track, many of the little churches have been saved, and appear still in their original form, just because of their poverty.

In the small parish church, it is to be noted that the mason and carpenter were always experimenting in their crafts, and it is in this type of building more than in a cathedral or famous church that the work of such artists is

more easily understood.

Village churches were built by the people for themselves, and, so far as can be told, with little outside assistance, save perhaps that which was given by

some wandering journeyman.

It is not too much to say that these unknown craftsmen produced the greatest peasant art of the world, and however much people ridicule the inartistic Englishman now-a-days, or the rude English yokel, it is well to recall that his ancestors created an art so great in itself that too often it is forgotten as being a peasant's art at all.

Often it will be found that the parish graveyard is older than the church, and the churchyard cross may be even older, for it was round the cross in the graveyard that the Christian cemetery grew. The photograph of Culbone Church is

an illustration of this.

When a church came to be built it was customary to place it on the northern side of the enclosure so that the shadow from the building might not fall on the graves. That is why the church

is rarely placed central in the old graveyard, while the cross usually is. Several of the early churches were built upon the sites of places of worship that were not Christian, and many are shadowed by yew trees. If not older than the buildings, these trees have almost certainly sprung from those planted on the site by primitive man, and it is possible that they may be vestiges of the groves in which he worshipped.

Broadly speaking, the plan of an English church will be found to take on one of three distinct forms, though there are also various intermediate types.

Briefly they may be referred to under three headings illustrated in the diagram accompanying this article:

I. The plain un-aisled rectangle consisting of nave and chancel.

II. The cruciform plan, with central tower.

III. The aisled rectangle.

The simplest form is a plain oblong chamber without structural divisions, but in most of the churches of Saxon and Norman times the chancel is a chamber separate from the nave. with an arch at the dividing line, as at Barfeston, Kent.

The east end may be either square or

apsidal, as at Moccas.

The second type of plan, known as the cruciform, is not likely to have been built to this form purposely for its symbolical shape, but rather grew from the desire of adding transeptal chapels,

as at Potterne, Wiltshire.

This type never became general, or popular, for the reason that where a central tower existed, the large piers supporting it blocked the view of an altar. The side walls of the tower were also made weak in forming the transept openings, an operation often attended with disaster by the collapse of the tower itself.

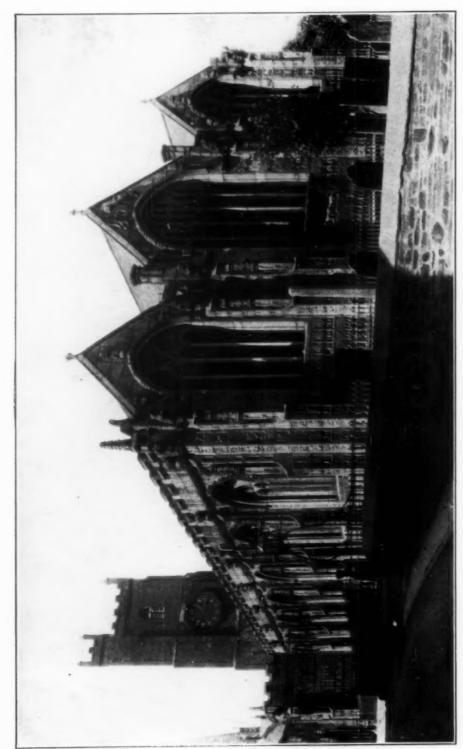
The third class, the aisled rectangle—indicated on the diagram as at Warmington, Northamptonshire, and Coggeshall, Essex—was the most popular type, and shows the final development to which church planning had grown at the time of the Dissolution of the Chantries.

As indicated by the dotted lines in Type II it can be easily understood how this form evolved from No. I by the adding of the transepts to the rectangu-



A charming interior of a small church is this at Worlingworth, Suffolk. A good example of a double hammer-beam roof, though the angels at the ends of the tie-beams, with few exceptions are missing. Font has carved pyramidical cover nearly 20 feet high, which originally belonged to the Abbey at Bury St. Edmunds.

Jacobean box pews, pulpit and sounding board.



St. Mary Magdalene, Launceston, Cornwall. A familiar three-gable termination which was developed by adding chapels on each side of the chancel. Used extensively in Devon and Cornwall. Also a good example of the use of local granite. Church was built between 1511 and 1524. The exterior is most profusely carved throughout with coarse sculpture.



A simple and unusual type is this church at Bagington, Warwickshire. The entrance door is at the west end, the north door having been closed up. Small tower at junction of nave and chancel. The south aisle is an addition to the original building, when no doubt the windows on the north side of church were increased in size to give additional light required.

lar form. No. III was a natural growth from No. II through adding the north and south aisles and the tower at the west end. By continuing the east aisles and forming arcades in the north and south walls of a church like that at Warmington, the plan as represented by Coggeshall is developed.

Most churches, it will be noted during the centuries, grew from small to large, from a simple and small beginning to a more pretentious proportion, for two reasons, that of having to meet the needs of a growing population and the requirements of a more elaborate ceremonial. There is no doubt that elaboration of ceremonial had more to do with the changes that took place in the original structure than any other.

In the smallest churches the actual needs were simple and clearly defined. It is interesting to note that from the earliest times the chancel was considered as belonging to the priest, and the nave to the people. This custom has continued to the present day in many places, for the rector of a parish is responsible alone for the repairs and upkeep of the chancel, while the nave is maintained by the parishioners.

Rarely, except in those churches that were entirely rebuilt shortly before the Renaissance period, is there to be found a building that was completed entirely in one style or period. They usually exhibit three or more styles and reflect the gradual evolution of the ages, presenting an irregularity which is both picturesque and fascinating to the student.

From the simple rectangular form, a church would be extended during the centuries in many ways, as occasion arose, an aisle or aisles, a chapel, or perhaps a tower or porch, being added at different times.

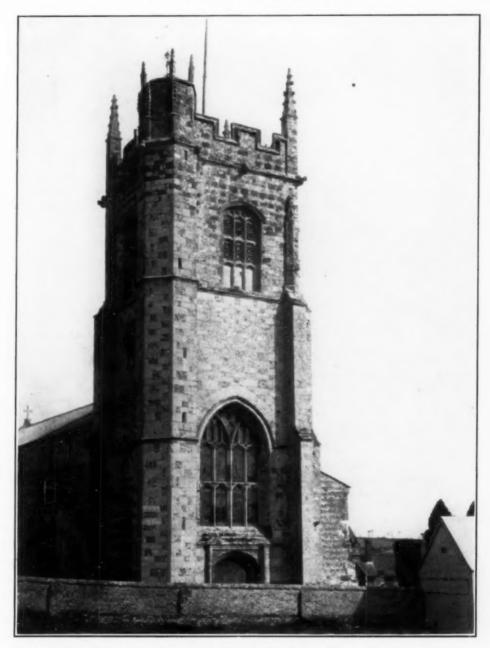


Dorsetshire, like Somerset, has many beautiful towers of infinite variety. Beaminster Church, standing picturesquely in the centre of the village and dominating the surrounding landscape, is typical of this class. The free standing pinnacles rising from the setbacks of the buttresses are unusual. The auxiliary octagonal stair tower adds greatly to the clustering richness of the whole composition.

Chantry chapels in the 15th Century were constantly in demand, and often the chancel was increased in size for additional altar space and ritual requirements.

In these changes, however, it will be noted that the form of the building throughout its history has to a great extent been influenced by the original church, and that the earlier additions have influenced those of later date.

Another point of interest is the fact that in making changes or additions to a church, the builders always respected what was good in the old, and thus many features of the ancient were preserved



Bere Regis, Dorset, one of the most perfect churches in the county. An interesting exterior of rather irregular checker-board stone and flint provides a beautiful texture. Belfry windows are especially well studied. The stair turret at the corner surmounted with weather-vane, is a variation on that of Beaminster. Niches for figures of saints are provided on each side of the large west window.

in the new work. Especially noticeable is this to be seen in the case of doorways, sanctity attached to them.

In making many additions or remodelling an old church the chancel arch in which seem to have had a particular some instances has been the only part preserved. To account further, it has to be realized that the arch formed the division between the nave, which belonged to the parishioners, and the eastern portion, or chancel, which was the property of the priest. Being more or less on neutral ground, the question as to who should maintain or make changes to it, was always debateable. Also it is quite probable that the good people of those days would be a little superstitious about making any changes to the arch, as above it was usually painted the Doom or Last Judgment—a favourite mediaeval subject which emphasized the importance of the Mass.

Due to the fact that daily services during the Middle Ages had to be carried on without a break, all structural changes had to be made without preventing such worship. No building was ever allowed to be closed for repairs, nor the continuity of worship in God's house to lapse. In our own day a congregation, driven out by builders or restorers, can resort to a parish hall, or mission room, but in the Middle Ages these alternatives were unknown, and the church was indispensable.

Consequently, if, as so often happened, an aisle had to be added to a church, it will be found that the outer side walls were built up and the aisles practically completed before holes were made in the side walls of the old church for forming the arcades. In such a way the work could be done without the workmen having to come into the body of the church at all. All the rubbish caused by taking down the old masonry could be removed through the side entrances of the new aisle, or as sometimes occurred, one of the end walls of the aisles was left unbuilt to the last, so that the masons could have free entrance for new material and exit for the old. following this method of construction, the old narrow rectangular church set the width of the nave in the remodelled building, with the result that the nave often seems out of proportion to the wide aisles added to it.

In order, also, that no building operations should interfere with the worship of the church, towers in the 15th and 16th centuries—a period when they became very popular—were almost always built at the west end rather than at the crossing of the nave and transepts.

Whenever any additions or alterations were made to a church, the builders of any age would always adopt the particular style or fashion of their day—the "modern trend" of those times.

This would be done regardless as to whether the church in question was "Norman," "Early English" or of any

other period.

Mediaeval builders of a later age never copied the style of their predecessors, nor did they try to make the details of their new work "match" what

had gone before.

One of the primary reasons for building churches in the olden days was not so much to accommodate worshippers, as to build a covering for the altar, for the whole religious life of the people was focussed upon the altar and the church thus became essentially an altar house. In the early days the congregation was a moving one, and people did not sit down to listen to a sermon. In the 15th Century additions were made to the average church more for the purpose of providing space for additional altars and chantry chapels than for any other reason.

Until the 15th Century it is highly improbable that there were in a church any fixed seats or pews as we know them now. People stood or knelt on the floor. A few seats or a bench were supplied along the side walls, but these were more for the weak and aged worshippers. Probably it is from this custom that there has arisen the phrase,

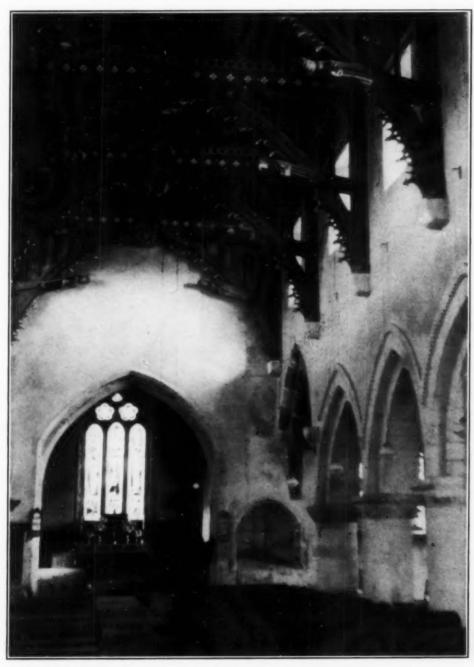
"the weak to the wall."

When means of communication were so poor, it was natural that the builders should, as far as possible, use materials that were to be obtained locally in

erecting their churches.

Stone was almost universally used for the building of churches from the times of the Saxons and Normans, though a few were built in wood and in Essex brick was a favourite material used successfully. The parish church at Sandon is an example of brick construction. The Normans at the Conquest introduced Caen stone into England and where water transport was available it was generally used.

The Barnock quarries of Northamptonshire supplied a large quantity of fine limestone to the Midlands, and a



Bere Regis, Dorset, has an interior with a Norman arcade, and a richly carved and multi-coloured timber roof. At Bere Regis Church is the Tuberville chapel reminiscent of the sad story of Tess in Hardy's novel. The recess at the side of the church arch is probably a "squint" (blocked up) for obtaining a view of the altar.

belt of fine stone runs diagonally between Yorkshire and Somerset, in which belt are to be found some of the finest churches in the country. In the Cornwall district granite was quite generally used, and the quarries of Bath formed another great supply of stone.

In the stoneless counties of East Anglia, flint, as distinct from building stone, plays an important part in the construction of the local churches. It is one of the hardest and most enduring grams and other devices. The Long Melford photograph illustrates the use of flint.

In Cornwall, the local granite used in about 90% of the churches is known as moor stone, and consists of blocks found lying near the surface of the open moor. It is a material unsuitable for work requiring a high finish or delicacy of treatment, and great skill was necessary in shaping this hard material. Launceston Church is an example of its use.



The chancel carried up as a central tower as seen in this church at Newhaven, Sussex, illustrates a type of building occasionally to be seen. At the Norman church at Newhaven the sanctuary is in the form of a circular apse, and subsequent additions include aisle and porch.

natural products. In the first instance, the building flints used so profusely in Norfolk and Suffolk were gathered from the seashore, or from the surface of the fields.

Dressed or regular-faced flint work in conjunction with cut stone from Caen was used on a large scale in East Anglia in the 15th Century, and later on the builders split the flints with still greater care to obtain a fairly even surface, and used only those that presented a dark or glossy appearance.

This flint work lent itself to a great variety of design in wall panels, monoChurches as a rule, especially in the 14th Century, are found to be low, and this was deliberate, for the builders wanted their churches to be in harmony with the countryside, and not to be blots on the landscape. If they wished them to appear as landmarks, then a tower was built, or a tower and spire. The love for strength and lowness which is a marked characteristic of English cathedrals, in contrast to those in France, is still more noticeable in the parish churches. The finest churches are usually to be found where the neighbourhood is monotonously flat or



This small church at Cretingham, Suffolk, has a very good example of a single-hammer beam roof though the rafters have unfortunately been plastered over. It contains box pews, with some of the older benches retained at the west end. On the left is a three-decker pulpit with sounding-board, reading desk and clerk's desk. On the right wall is the "Lord's Prayer, Ten Commandments and Creed," and at the tower arch (blocked up) the Royal Coat-of-Arms. These, at one time, had to be set up in all churches.

Norfolk and Suffolk. In Somerset the reduced to insignificant proportions.

e

destitute of striking features, and partic- towers soar upward with a noble ambiularly in the fen district of Lincolnshire tion. In other parts, where nature and certain flat areas in Cambridge, itself is of the grandest, towers will be

One can appreciate the value of the church in the average English landscape by trying to realize what it would be like were these buildings removed.

Due in part to the building materials available, there is a certain similarity or uniformity about the churches in different districts in England, especially amongst those built in the 15th and 16th centuries.

Two hundred and fifteen of the churches of Cornwall and Devonshire show extraordinary uniformity, due in great part to the intractibility of the granite used. Norfolk and Suffolk com-

An interesting peculiarity of these roofs not often noticed, is that a tiebeam was scarcely ever used, for the trusses were framed with pegs and mortised in such a manner that tensional strains were overcome.

The roofs of the 14th and 15th centuries are the most interesting and no better examples are to be seen than those in East Anglia. Few persons when visiting churches take much notice of the roofs, for they are inaccessible and dark, yet they are unrivalled, and no other country in Europe has anything to compare with them.



The old rood screen (1480) at Eye, Suffolk, has recently been carefully restored and crowned by the rood loft and modern rood and figures. It indicates fairly faithfully the appearance of a rood screen and loft complete as they would appear before the Reformation, at which time they were all destroyed.

prise another definite area, for here the use of flint decoration is characteristic, and long naves, immense windows, and splendid hammer-beam roofs are outstanding.

The churches of Somerset and part of Gloucestershire have glorious towers and these may be considered as featur-

ing a third zone.

The English mediaeval builder rarely attempted to put stone vaults to his buildings. He was thus enabled to use light walls and large windows, and to develop a particularly fine English feature—the open timber roof.

Built almost always of English oak, in the days when the material was cheap and accessible, it could be obtained in The hauling of the logs, great length. when one realizes the bad state of the roads 500 years ago, must have been a One can picture tedious business. teams of 11 and 12 oxen slowly dragging these great tree trunks. To get them through some of the narrow streets and round the sharp corners of the old market towns must have been a problem, not forgetting the operation of erecting them in position at the church. All sorts of materials were used for

covering these roofs, including slates and reed-thatch. These required a steep pitch, but in the 15th Century lead became popular and roofs were built nearly flat.

There are many distinct types of trusses, but two of the most interesting and satisfactory are those known as the arch-braced tie-beam roof and the hammer-beam roof. In the first, the arch brace strengthens the tie-beam, and generally beautifies the roof.

The hammer-beam roof is a logical

suffering from the persistent attacks of the death-watch beetle and to such an extent as to endanger their safety.

Appeals for the preservation of these roofs are constantly being made, as it is a serious problem in small agricultural districts to find the necessary funds.

The entrance to a church was nearly always a lateral one.

Where there is only one, it was usually placed on the south side, though geographical conditions or an ancient roadway would often necessitate its being



Thaxted, Essex, is a village singularly remote from the outer world and contains a really remarkabe church 183 feet long and 87 feet wide, which has been called "The Cathedral of Essex." It is of the early 16th Century and a cruciform building.

development of the arched tie-beam, and its presence is almost a sure criterion that it is of 15th Century date.

The hammer-beams, single or double, are usually ornamented with figures of angels with outstretched wings, and this type becomes one of the most beautiful roofs imaginable. When fully coloured these roofs must have appeared almost ready to be lifted heavenward by the angelic host carved on every vantage point.

It is strange, and an architectural calamity, that after 500 years, many of these roofs which are such wonderful examples of village carpentry are now placed at the west, and in exceptional cases on the north side.

For processional purposes a door on the north side, opposite to the south door was often required also. But there seems to have been a serious dislike to the north door; in fact this side of the church was looked upon as the "wrong side," and in many cases the doorways have been blocked up. This may be due in part to the fact that in the Middle Ages the north part of the graveyard was reserved for the burial of excommunicated persons, suicides and unbaptized infants.

It was not until the 15th Century that west end doorways became customary, when they were required in the larger churches for ceremonial purposes on festival days, an essential feature of which was the carrying of the Blessed Sacrament under a rich canopy. For this reason they had to be wide, high and imposing.

Side doors in parish churches were usually protected by porches, which in some cases are very elaborate and two stories in height. The elaboration of the porch was no doubt due to the desire to emphasize the importance of the entrance to the place of holy mystery, and thus it was usually surmounted with a cross and an image of the patron saint. Both these features were as a rule destroyed by the iconoclasts

of Cromwell's time. In the Middle Ages the porch had many secular functions. It was in the church porch that the sheriff would perform the first acts when a man was about to be outlawed. The porch also served the purpose of an ancient "city gate", for public notices were posted on it, a custom which prevails to this day. At other times, business transactions were conducted in the porch as a guarantee of good faith. Until the time of Edward VI, marriages were performed in the church porch, only the concluding portion of the ceremony being performed before the altar.

earlier part of the services of baptism and churchings also took place here. The uses of the upper storey in a porch seem to have varied. Sometimes they appeared to have been used as living quarters, in other places as occasional chapels. In Post-Reformation days they often became libraries, or store rooms for the parish armour.

Churches are associated with towers from the earliest days. The favourite position for them was at the west end, though they are seen at the crossing of the transepts with the nave, and also where the site requires it they are found at one side of the church. The forms

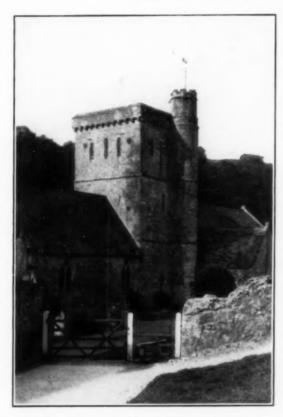


With an open post and beam roof, and lofty walls, the exterior of this church at Thaxted, Essex, is of very fine proportions. The aisles to both nave and chancel, which have very fine, rich open roofs, are almost as wide as the centre of the church. There are no fixed seats in the building. The interior with its effective candelabra fixtures, brightly coloured banners, furnishings, stained glass and large open floor space gives one a very good impression of what such a church looked like in the Middle Ages.

given to stone-built towers have so great a variety that they might be called infinite.

In examining them, one is struck by the fact that the geological nature of the neighbourhood has affected to a marked degree their form and colour. Being always conspicuous, the mediaeval builder seems to have realized this by the excellence of design he attained in them. This applies particularly to the wonderful towers of Somerset and Gloucester.

The massive strength of some of the early 12th Century towers seems to infer that they were used for military purposes, and as strongholds in case of need.



Situated in a very beautiful country is the striking and highly interesting Church of Branscombe, Devonshire. The tower is of Norman date and though the north-west turret was raised at a later date, the building retains quiet lines and fits in charmingly with the beauties of nature.

Probably the custom in the later churches of ornamenting a tower with an embattled parapet, is an aesthetic survival of the times when archers stood behind the merlons of a castle wall to repel attack.

Towers were also used as beacons, and before the days of lighthouses. towers were provided with lights, and the bells would also serve to warn travellers and mariners at sea.

The most important use of towers, after all, was for the ringing of bells. This was a distinctly national accomplishment, and one the Englishman has always taken pride and pleasure in, so much so that England has been called "the ringing isle."

In most villages, bells are still properly "rung," not chimed for church services,

and few villagers would consider a wedding complete without the bells in the tower announcing this fact with a proper

peal.

The "ringing" of bells, unknown in this country, is a method of sounding them which is much more effective than can be obtained by chiming. It is only in England, moreover, that belfries are arranged for such ringing. In chiming, the bells either stay motionless while they are struck, or are slightly swung by the pull on the rope, but in ringing, the bell is swung around its bearings until, mouth upwards, the rim is struck by the living clapper. Most church towers have peals of six, eight and sometimes 10 bells. and when it is realized that some tenor bells weigh over a ton one can understand the momentum and weight of swinging metal to which the cage, beams and tower walls are subject. Campanology, the art of bell-ringing, is still practised with great keenness in certain districts and fraternities of bell ringers make periodical friendly visits to neighbouring churches and ring out the many different series of changes which it is possible to execute on eight bells. It is quite a common thing for these peals to last for three or more hours, and to make in

this time three or more thousands of

changes.

One of the greatest achievements, however, that has ever been recorded, was that performed in August, 1927, at the little church of Heptonstall, near Halifax, when eight ringers locked themselves in the belfry and rang 17,824 complete changes without a mistake, on the eight bells that weighed from 700 to 1,800 pounds each.

This peal, known as the "Oxford Treble Bob Major," was made without a break in 10 hours 51 minutes, during which time the ringers took no food or drink of any kind and, of course, had to stand in the one position for the whole period. Requiring great bodily strength, mental concentration—as one mistake would have upset the whole—and con-

certed action of a high order, it was a

great achievement.

It had been said of the spire, that of all the members of a Gothic building, the spire is the most original, the most religious, and the least essential. Its effectiveness is generally admitted and poets have singled it out for special mention. The skill and daring shown in the construction of the many stone spires are always something to marvel at, and the successful completion of a spire was

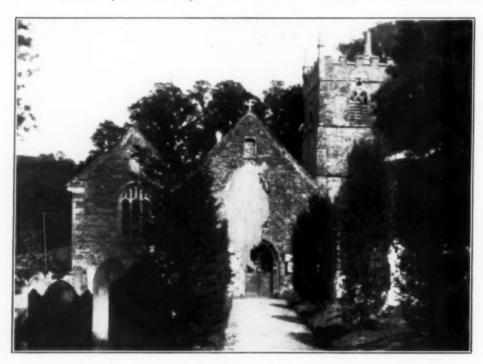
the cross—the familiar cock with its symbolic meaning of watchfulness is, after all, appropriate for this position of honour. th

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Both the slender spire and the lofty tower are developments of a flat country, for as a rule hilly countries did not

produce spires.

The screen at the entrance to the chancel divided the rector's part of the church from that of the people. Because it was in mediaeval times associated



Veryan, Cornwall. A typical Cornish village church, showing 14th Century features added to an earlier building. Situated in beautiful natural surroundings, it appears as though it had grown up with them. Figures of saints originally occupied the niches in the two gables.

always an occasion for special rejoicing.

There seems to be no fixed rule for finishing a tower with a spire or without, but naturally, it is in those districts in which suitable stone could be obtained that the best examples are to be found.

The 15th Century towers rarely had spires. They seem satisfactory and complete without them, and the spire does not fit in well with the flattened roof of that time.

Usually terminated with a weather vane—though one might have expected

with the great representation of the Crucifixion, it was called the Rood Screen. The early screens were simple and low, but in later times they became richly decorated. As they were connected with so important a subject, the rood screen embodied the very best of the craftsman's work and skill. Such screens were often painted with the lower panels treated in gesso-work and filled with figures of saints.

Above the screen, on the wall of the chancel arch, was the representation of the "Doom"; and the first bay of the nave roof directly over it was often richly decorated on account of its

position.

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The posts of the screen were required to support the strong beam on which was placed the rood. Decorated with rich open tracery above, the lower part of the screen was solid, with doors in the centre. Care had to be taken that there was nothing in the design of the screen that would obstruct seriously the view of the ceremonies at the altar. On

Somerset. The lofts were approached by narrow staircases in the piers on each side of the arch.

During the 200 years preceding the Reformation, chantry chapels founded by individuals and guilds increased to such an extent that in order to make provision for them, structural changes to the building were constantly being made. In many cases screens were used for partitioning off the end of an aisle or space for a chapel. There is no doubt that the way in which the mediaeval



An interesting example of flint work used with stone trimmings to a very limited extent is seen in this church at Coggeshall, Essex. This district provides no stone quarries of its own, and consequently all stone had to be brought from a distance. The aisles and nave are continuous for the whole length of the church. The diagram on page 390 explains this type which was very popular in the 15th and 16th centuries.

the top of the screen was a walk for the priest which was called the loft. This was used by him in attending to the different lights, and when reading the gospel. It also supported the rood and any special reliquaries. In Post-Reformation times the rood loft was occasionally used to hold the village organ and choir.

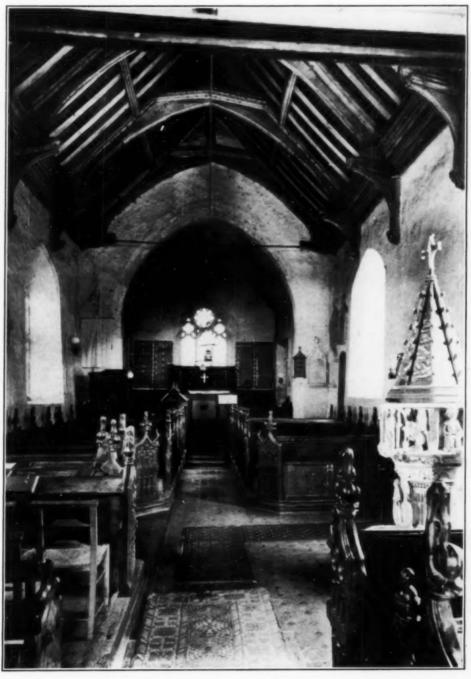
The construction of the loft formed the occasion for those wonderful canopies, which were made in the form of a curved and ribbed half-vault.

Good examples of screens are to be seen in East Anglia, Devonshire and doctrine of Purgatory was taught by the Church in the 15th and 16th centuries was largely responsible for the endowment of the innumerable chantries. The doctrine received an immense impetus after the calamity of the "Black Death," as did church building generally.

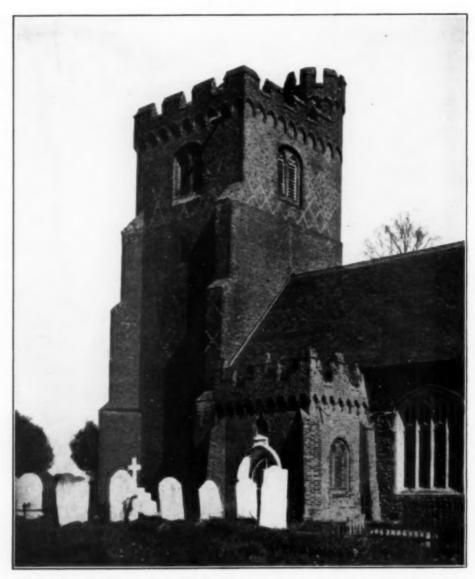
The effect of this teaching is also seen in the many appeals for prayer that donors to the church made for their souls' welfare and in the almost universal requests for Masses in mediaeval wills of this time.



The 15th Century roofs of this church at Mildenhall, Suffolk, are worthily its glory. They are almost unique and certainly the finest of their kind in this part of England. The angels with outstretched wings between the trusses are very effective, and the roof of the north aisle has hammer beams containing figures of lions and other beasts carved on them. The design of the east window is interesting as being a form almost unknown elsewhere. The church has a seating for well over 1,000 people. The large size of the building is realized from the fact that it is 170 feet long, the nave alone being 85 feet long by 25 feet wide.



St. Martin's, Tuddenham. A pretty Suffolk village church containing a good arch braced type of roof, and some delightful 15th Century panelled benches with carved heads and characteristic poppy heads.



Sandon Church, Essex. In a district where stone was not to be had locally are to be found some good samples of brick craftsmanship. The tower and porch at Sandon (early 16th Century) is one of the best of these. A diaper work formed of blue headers is worked in effectively with the vari-coloured red bricks.

It was not customary to have any seats in the main body of a church before the 15th Century. At this time, however, appeared some fine benches and stalls. Canopied seats were reserved for the large and rich churches, but carved ends of infinite variety are found in the smaller buildings. The favourite finial to the bench ends was the "poppy head" a motive borrowed from

the apex of a crocketted gable. Many good examples can be seen in East Anglia, and also in the south-western counties.

After the Reformation came the square, box-like pew, made of panelling four to five feet high, seats being arranged within these dwarf-like rooms on all four sides. These pews were usually allotted to the owners of the various manors and farms of the village, and

they passed from person to person with the land. It is thought that these pews were introduced to give a little better degree of comfort to those who were expected to stay for the long services that became the fashion at this time, and also to protect the occupants

against cold and draughts.

In the Middle Ages the nave of the church was used for many purposes other than that of holding distinctly religious services. There was not that sharp distinction between the affairs of the world and the spirit that is made nowadays. To people of the 20th Century the holding of a "Church Ale," or the sale of goods in a church, is almost inconceivable.

In order to serve such social and commercial purposes the nave had to be kept free of seats or chairs, and one is reminded that the customary forms given to the bases or pillars of a nave arcade were so designed without any thought of seats obscuring them. Unless the floor space, moreover, was to a great extent free in this way, it would have been inconvenient to store wool, or to stage plays, as was done in some churches.

Some parishes had special church houses (which later developed into the "Church Inn"). Where these existed the "Ales" were held in them, but in their absence these feasts were held in

the church nave.

There were the "King Ales," associated with Whitsuntide and the rites of May Day, and the election of the king and queen of the May. The holding of "Ales" was a means of collecting money. The churchwardens would arrange for the ale to be brewed by someone skilled in the art at the parish brewhouse. The brewing of ale was under the control of the wardens, for as a general rule no one was allowed to brew or sell ale until all that had been brewed on behalf of the parish was sold.

The people of the parish would then be called to attend the "Ale," each being charged a certain sum per head according to sex and rank. They feasted and made merry and the profits were bestowed on the maintenance of the church. These "Ales" were also used for other purposes, such as providing a dower for poor village brides, when no doubt the feasting was united with the rejoicings

of the wedding. There were also cases when the object was the providing of funds for the poor or for cleaning the church.

In the latter connection it was the custom on certain occasions in the year to cover the floor with rushes, straw, box, and some sweet smelling leafage which had at intervals to be cleared away.

Existing documents prohibiting such "Ales" being held in churches prove that

they existed.

There is evidence, also, that the mediaeval chapmen were wont to use the naves of churches for the sale of their goods, though this was not such a usual custom as that of selling such merchandise in churchyards. In the latter case it was not unknown for these travelling salesmen to sleep in the church itself, though such practices were denounced. These salesmen had to pay a toll for a stand in the market place, and perhaps they escaped this, by using the churchyard, although some tax may have been demanded.

The church was also used for the acting of plays, though these naturally were either mystery plays or those founded

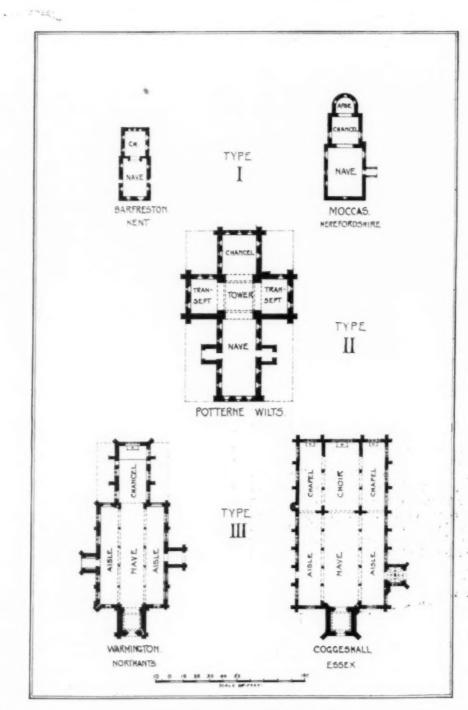
upon biblical stories.

Village dancing took place in churches, but this was more often indulged in in the churchyard. It is also recorded that the Maypole, and the coats and bells used in Morris dancing, were kept in the church.

Churchwardens at one time acted as bankers and pawnbrokers to the village, and goods held in pledge were stored in the church. In this connection one can appreciate the importance of the parish strong boxes still to be found in many churches.

Sales of property, the making of agreements and other legal transactions, were often made inside the church walls, giving them the air of being really solemn contracts. The church porch was more often than not used for this purpose.

It is also known that church courts were held inside the church. From this custom there has come the court of the Bishop's Chancellor to-day, with its work of granting faculties for making changes and additions to the fabric. It was inside the church that the chief men of the village would discuss secular



Typical plans of parish churches. (See text page 370)



Barfreston, Kent, is one of the best examples existing of a small church of the late Norman period. The circular heads, the carved corbels at the roof eaves are characteristic of that time. The south doorway is very richly carved with a figure of the Almighty in the tympanum. The small door to the chancel has been blocked up.

business and elect their officers, which assemblies have come to be known now as vestry meetings.

In the Commonwealth days it was quite usual for soldiers and horses to be billetted in the nave of the church, a use which may not have shocked the people of those days, but would horrify church people of the present.

While regarding the church as primarily devoted to the worship of God, our ancestors considered the soul and body so intimately connected, that they used the naves of their churches for distinctly secular purposes. It was largely on account of this, that all members of the community united and took so great an interest in maintaining and developing the parish church. Used for so many

different purposes, and on every day of the year, it was the centre of all their activities, both religious and social.

Dr. R. A. Cram in his book on "Church

Building" says:
"There is a strange personality about these churches, an intimate, human quality that one looks elsewhere for in vain. They are without splendour or magnificence; they possess nothing of the premeditated grandeur, the proud magniloquence, of the cathedrals and abbeys; there is little evidence of a clear and preconceived design. simply the living monuments of the sane and healthy devotion, of the joyful Christian faith, of men to whom religion was the beginning and end of all things, even though there was much between.

Acknowledgment is due to Mr. W. Pope Barney of Philadelphia for permission to reproduce photographs on pages 374, 375 and 377; to Mr. H. Munro Cantley for photographs on pages 371, 379, 386 and 387; to Mr. Edwin Gunn for those on pages 366, 367 and 368; to Messrs. F. Frith and Co. for photographs on pages 362, 364, 365 and 372 and to the Architectural Forum for photographs of Bagington Church on page 373.





Royal Canadian Air Force photograph. The town of The Pas on the south bank of the Saskatchewan River. The railway bridge on the Hudson Bay Railway spans the river at the narrows from which it would appear that the town received its original Cree name. In the background is The Pas lumber company's mill representing an industry which was responsible for the establishment of the town.

The New North in Manitoba

By Dr. R. C. WALLACE

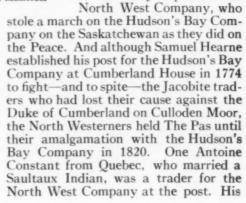
T is not the least interesting phase of the present geographical and industrial progress in Canada that new life is being given to territory which was the scene of exploration and adventure, but has been relegated to the background of interest since the time that agriculture

began to dominate the stage in western Canada. It is significant of the relative importance of the north at the time when the Canadian Pacific Railway was seeking its way through the mountain passes, that there were not lacking those who advocated the Peace River route as the logical way to the coast. The north has come back, because of the aeroplane, the air camera, the newly discovered orebodies, the settlement of the Peace River country, and the Hudson Bay railway. Our prosaic matter-of-fact thinking for the next 50 years will be concerned with the economic welfare of the partially settled agricultural prairies; our vision and imagination will be stirred, once again, by what the north may have to offer. And in this mood our enthusiasm may outrun our discretion - may indeed already have done so. Even in

our sober moments, however, we are forced to admit that this new adventure northwards has given to Canada something distinctive in her economic progress, and is supplying a motif in art and in inspiration which may well affect the Canadian outlook in very definite ways.

To one who, in the spare moments of the past two years, has attempted to familiarize himself with the northern Mackenzie, the Peace and the Athabaska, it may be permitted to go back in this article to territory familiar in former years, and much in the public mind because of the completion to the Bay of the Hudson Bay railway, and because of the mineral developments which have been associated with the name of The Pas. It is after all not a new country. The very name of The Pas has rung the

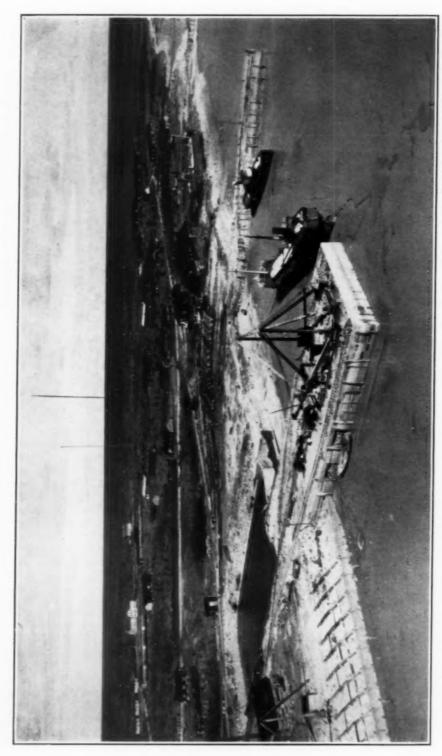
changes in history. To La Verendrye in 1744 it was Fort Poskovac, to Niverville in 1751 it was Pascoya, to Carleton in 1768, Fort Pascoyat, to Mackenzie in 1790 Opas, to Franklin in 1819 Basquiau, to McLean in 1833 Riviere du Pas, to Young in 1840 The Pas, to Budd in 1840 Le Pas de la Riviere, to Darveau in 1843 Le Pas, to Hind in 1858 The Pas; and The Pas it has been in Hudson Bay records, and so the town was incorporated in 1912. The only dry camping place in times of high water on the Saskatchewan River on the long stretch between Grand Rapids at the mouth of the Saskatchewan and Cumberland House, a distance of 200 miles, The Pas stands on a ridge of glacial debris cut through sharply by the river, and to-day connected by a stately railway bridge. It was early a post of the





DR. R. C. WALLACE

who has been President of the University of Alberta since 1928, is a graduate of the Universities of Edinburgh and Gottingen. From 1912 to 1928 he was professor in charge of the Department of Geology and Mineralogy, University of Manitoba, and Commissioner of Northern Manitoba from 1918 to 1921. Dr. Wallace was President of the Canadian Institute of Mining and Metallurgy, 1923 to 1924, and from 1926 to 1928 Commissioner of Mines and Natural Resources for the province of Manitoba. He is the author of several works dealing with the natural resources of Manitoba.



Royal Canadian Air Force photograph. Port Nelson on the north bank of the Nelson River. The wireless telegraph station appears in the background and the silt showing on the river in the foreground indicates the difficulties in establishing a port at this place.



Norway House post of the Hudson's Bay Company immediately north of the north end of Lake Winnipeg, one of the most complete posts in the north country. For many years this post served as the place of council meetings of the Hudson's Bay Company in connection with the trade from the western interior to York Factory on the Hayes River.



A scene on the Grassy River, a well travelled road in the mineral belt of northern Manitoba. The Grassy River flows into the Nelson River.

great-grandson is now the Chief of the Cree band of Indians who sold the townsite of The Pas to the whites, who were the vanguard of northern progress. This band of Indians is now established on the north side of the river, which divides but does not adequately separate the old race from the new.

The old Indian village, well placed on the only ridge which crosses the Saskatchewan, has prospered with the years. A long succession of explorers passed and repassed while yet there was no industry but the fur trade and the buffalo hunt. The boy Kelsey, the most elusive of travellers, doubtless passed The Pas on his historic journey to the buffalo plains. Anthony Hendry was received there with great courtesy by hospitable Frenchmen. In the years of stimulating rivalry between the North Westerners and the Hudson's Bay Company-1774 to 1820-episodes doubtless occurred on the lower Saskatchewan River about which history will be forever silent. Franklin, too, passed that way. The Franklin relief expedition which wintered at Cumberland House assisted in building for the Rev. James Hunter the Church and Mission House; and the pews

still endure. Hind remarked on the field of wheat which the Constant of those days was responsible for, and which stood almost alone in the west. Eventually there came the lumberman, and the railway reached the banks of the Saskatchewan at The Pas in 1908. Ever since that date, The Pas Lumber Company has owned one of the largest sawmills in the prairie provinces.

In 1910 the first sod was turned for the Hudson Bay Railway, and the work was pushed forward until 1918. After a long cessation, and after the decision had been reached to change the terminus at seaboard from Port Nelson to Churchill, work was again pushed forward in 1928, to reach completion late in 1930. Still another movement which more than any other affected the daily routine of the northern town came with the mineral pioneer. At Flin Flon, and later at Sherritt-Gordon, copper-zinc mineral discoveries of significance were made. The town thronged with engineers, financiers, prospectors, miners, adventurers. The railway pushed out to Flin Flon; then to Sherritt-Gordon on Cold Lake. The Churchill River, for the first time in its history.



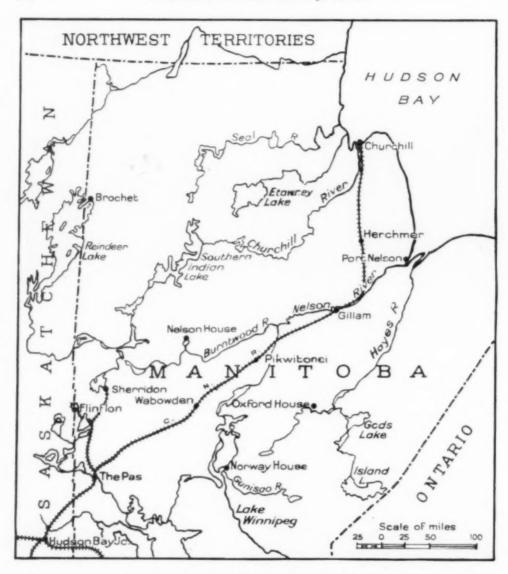
National Development Bureau photograph.

A winter view of one of the main streets of The Pas. It is characteristic of the town, which is cosmopolitan in character, interesting in its cafe life and distinguished by an individuality which is only possible in a frontier town dependent on its own resources and far removed from agricultural life.

was tapped for power. That power now drives the engines at the Flin Flon and will reach Cold Lake before these words appear in print. The Pas grew in stature over night. It is a northern metropolis. It can even boast of a bread line. It has arrived.

Lest it may appear that undue attention has been given in this article to the town itself, one hastens to point out that The Pas is the administrative center for the whole north country within the boundaries of the province. Thither the network converges. Thither all information comes. Subject only to the control of the provincial administration, there policies must be formed and decisions made. And this can only be done with an understanding of the north. It is a wide and diversified north-the first great north in Canada to be traversed by a railway, as it was the first to be traversed by a route of communication to the west. The Hayes River, once so busy a thoroughfare, now lies quiet, side-tracked by the railway; once the route to the west, even to the mouth of the Mackenzie River, it now speaks of the past, and recks little of the future. At York Factory, once the centre of

activity for the outfitting of the great Company for the inland posts, and boasting of over 200 employees, there are now the old buildings, the cannon which now serve to remind of La Perouse's daring surprise attack on the factory from the Nelson River side over a muskeg trail, and the old church falling-or fallen-to ruins, cut down by the ever-advancing north bank of the Haves River, but with a priceless relica stained-glass window presented by Lady Franklin in memory of Sir John Franklin, who set foot in Canada at this spot in 1819. There is a library too, a building small but complete, silent witness to the fact that the men of the company read well for their time and better than we do for ours. The river has its note of pathos as well. Far up this river, over 200 miles of swift water from the sea at the post of Oxford House, there stands a lone tombstone, now over 100 years old, to the memory of the baby daughter of the then factor and his wife. The little girl had died very far from "home". The tombstone was brought across the Atlantic and up the long stretches of the rapid flowing Hayes River, as a token from the land to which

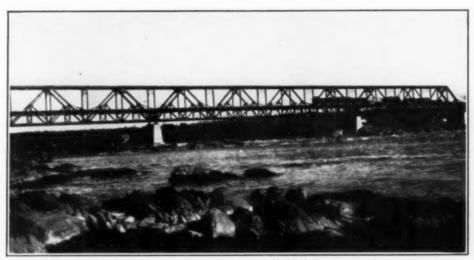


Map showing the northern part of Manitoba, the "New North" as dealt with in the accompanying article.

the exiles turned in their sorrow. (Forsitan et haec olim meminisse juvabit.)

The Nelson River, one of the most majestic of the waterways of this continent, avoided by the explorers and the voyageurs because of its turbulence, stands facing the future and recks little of the past. Crossed and recrossed by the Hudson Bay railway, and with one of the crossings—at the Manitou Rapids—affording a picture of the river in all its beauty, soon to provide a magnificent

supply of power for future industry at the Whitemud Falls, the Nelson River is a resource to be reckoned with. It drains to the sea the waters from a vast territory in western Canada from the Great Lakes to the Rockies, and drops this volume of water a vertical distance of 710 feet in a horizontal distance of 400 miles. These facts alone are portentous. That the waters will run for many long years without being adequately harnessed is beyond discussion.



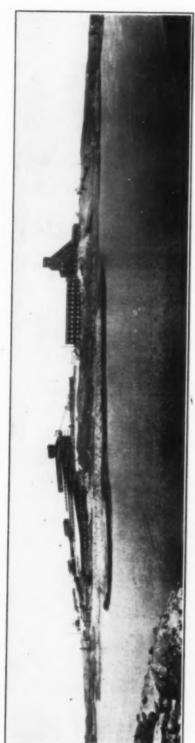
National Development Bureau photograph. The bridge across the Nelson River at Kettle Rapids on the Hudson Bay railway. This was the end of steel during the period when no construction work was done on the railway and until the decision was made to change the port from Nelson to Churchill.

Pulp manufacture and mining, and the demands of industrialized Winnipeg when long distance transmission of high possibilities. In an age and a country

such as ours, the transformation of possibilities to actualities may take place almost literally over night, or again voltage current is more feasible, are the may await many turns of fate, and with a long weary waiting.



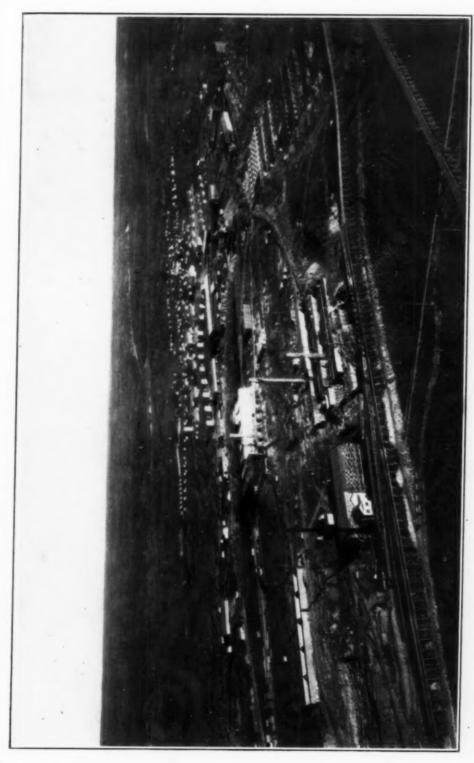
The power plant on the Churchill River at Island Falls in the province of Saskatchewan for the development of power to supply the Flin Flon and Sherritt-Gordon mines. This is the first power development on the Churchill River and the machinery was brought in over iced roads by caterpillar traction.



A view of the buildings of the Hudson Bay Mining and Smelting Company at Flin Flon showing the shaft house and the



The shaft house and mill, right, and concentrator, left, of the Hudson Bay Mining and Smelting Company's property at Flin



Royal Canadian Air Force photograph. A bird's-eye view of the buildings at the Flin Flon property in the early stage of construction. In the background is seen Ross Creek, from which a waggon road led through to the Flin Flon property before railway connection was established.



National Development Bureau photograph.

The winter view of the early camps at the Flin Flon mine. The Hudson Bay dog derby was established over a course from The Pas to the Flin Flon mine and return, a total distance of approximately 190 miles.

Something of the bitterness of waiting the pioneers who settled in this north country before 1910 have experienced, and many were unable to hold on. But there is much that has been achieved. A railway to salt water in central Canada is now a fait accompli. It will have

its years of difficulty, and will need the good will of the citizens of Canada. But few can doubt that it will eventually win through. It makes accessible a great territory of which much may fairly yet be expected. It provides an avenue

(Continued on page 406)



Lynx Falls on the Grassy River, one of the most picturesque views in northern Manitoba. The river has only a small volume of water, but the falls present an impressive spectacle.



National Development Bureau photograph.
The steel bridge from Port Nelson to the artificial island which was established on the Nelson estuary. This construction was necessary because of the shallow water off the north bank of the Nelson River. This port has been abandoned.



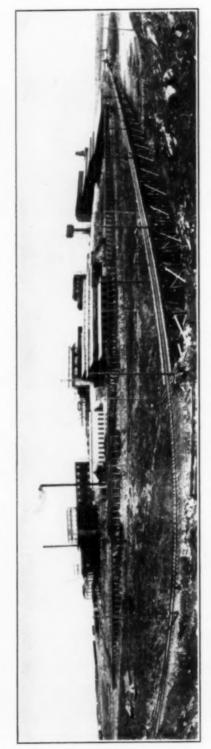
The east shaft of the Sherritt-Gordon mine. The main mining and smelting operations are being carried on at the west end of the property and further work has not been done to establish mining operations on the east ore body.



York Factory on the north bank of the Hayes River. An old Hudson's Bay Company post, which was the main factory on the west shores of the Bay for the building of York boats and the housing of the necessary trades connected with the Company's operations in north-western Canada.



View of Flin Flon property and village looking eastwards. Hudson Bay Mining and Swelting Company.



The buildings at the Flin Flon mine before construction was completed. The concentrator appears to the right of the picture and the smelter to the left.



The Dominion air station on Cormorant Lake adjacent to the Hudson Bay Railway which is seen in the left background.

This station is the centre for air patrol service in north-western Manitoba and north-eastern Saskatchewan.



Former Chief Constant of The Pas Indian Reserve. Henry Youle Hind in his descriptions of the Saskatchewan River below Fort La Corne mentions that wheat was grown by a Constant of whom former Chief Constant is a descendant.

(Continued from page 402)

direct and short, for grain and for livestock to the markets of Europe, and an avenue direct and short for imports to

the north central areas of Canada. And it connects with the sea. It is true that it is a bleak and inhospitable sea with a shore line bleak and unattractive. A game guardian in northern Manitoba. otherwise reputable, once told the writer that on travelling up the right of way of the Hudson Bay railway one winter day he met a jackrabbit bound for the Bay. It was the second visit to the shores of the Bay that the jackrabbit was making; and he had strapped on his back all the food that he was to need while at the Bay. The facts may bear scrutiny; the deduction is abundantly obvious. Notwithstanding the fog and the cold winds, the Bay offers a coastline for inland exploration such as no new territory available in Canada does or will offer. Therein lies the challenge, and the challenge will be accepted.

It is an historic coast line. Hudson passed out into fame somewhere in James Bay, not to the riches of Cathay, but to the splendour of an imperishable memory. Button fought scurvy at Port Nelson, Munck at the mouth of the Indian River of the Strangers, now known as the Churchill River. Fox and James followed on their trail and mapped parts of the east and west coasts. There



Royal Canadian Air Force photograph.

Picture taken in the construction period of the Flin Flon buildings.

still remained the figment of Cape Monmouth cutting in two the lower part of the Bay. Then came Radisson and Groseillers, adventurers both, and fit godfathers to the Company of Adventurers of England Trading into Hudson's Bay. In 1670 the company established itself, and soon forts were built at Albany, Moose, Rupert, Nelson, Severn, Churchill and Charlton Island. There were the skirmishes with France even in Hudson Bay, when France and England were enemies. The ruins of Fort Prince of Wales are eloquent of that fact. But it is a happier, and a greater, memory that La Perouse, a very gallant gentleman, saw to it that the story of Samuel Hearne's journeyings in search of the Arctic Sea and the source of the northern copper of the Eskimos, should be given to the world. Samuel Hearne, though defeated and taken captive at Fort Prince of Wales, had achieved signal victory over the north in his memorable journeys. It was fortunate that the victor at Fort Prince of Wales had the magnanimity to appreciate that fact.

The incidents of the history of the past three centuries, though they stand out sharply in the minds of those who have endeavoured to understand the north, were hardly sufficient at the time to



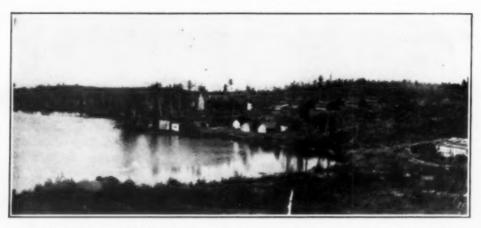
Christ Church, York Factory. The rear window of this building was presented by Lady Franklin in memory of her husband, Sir John Franklin.

ruffle the surface of the great calm which had been for eons of time, of the essence of the country. Now that land is shaking itself as from a deep sleep. Mining and metallurgical problems of the first magnitude are being attacked by keen and highly trained minds. The



National Development Bureau photograph.

The pilot mill at the Flin Flon property, established during the early operations of the Hudson Bay Mining and Smelting Company to test the flotation process for the separation of the copper and zinc sulphides. Because of the success of these operations the company decided to go forward with large scale production.



The original camp buildings at the Flin Flon mine as from 1916 to 1923. At this time the communication to the property was by steam-boat and canoe route from The Pas, a three or four day trip in summer, and by dog-train in winter.

country is being transformed. To the writer the pictures of the buildings and equipment at the Flin Flon and at Sherritt-Gordon, and the power plant at Island Falls on the Churchill River, are almost unbelievable—and the absence has only been two short years from territory which had become very familiar. The old routes of travel are forgotten, though a passing glimpse from the railway car may still serve to remind the pioneers of their trails. The trained scientist and the engineer have come in, and the old time prospector, uneasy at the fulfilment of his dreams, moves

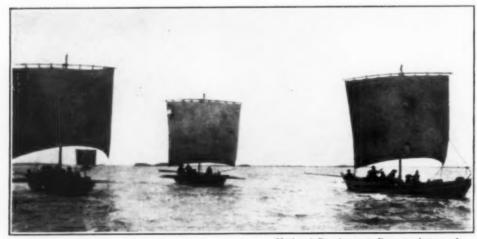
further on into the wilds. Already the scientist has triumphed in the application of skill and knowledge to the complex problem of the separation of the copper and zinc sulphides from each other and from the talc in the country rock; and because of this achievement a large industry is under way. The stage is set for other achievements in metallurgical and mining practice, for costs have to be kept down with a rigid hand in order that reasonable profits may accrue from the operations. The new movement in this ancient country is significant therefore not only; because

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National Development Bureau photograph.

York boats under sail on Split Lake, northern Manitoba. The York boat has practically disappeared and the Split Lake Indians were amongst the last of the Cree Indians to use the York boat in northern Manitoba.



Royal Canadian Air Force photograph.

The mill and concentrator at the Sherritt-Gordon mine then in process of construction. The concentrator is situated on the west end of the ore body which extends across the picture in the direction of the buildings in the background. This mine is situated on a beautiful lake and when the buildings were completed the vegetation had remained untouched by fire.

of its economic importance, which must not be underestimated in a pioneer country where so much of the wealth that we so proudly count our own is still latent, and, therefore, to all intents not for us real, but still more because through this new order trained minds are encountering major difficulties and are solving them. This talent for initiative and for the application of theoretical science to practical problems which is peculiarly the gift of the trained young Canadian will find a very happy field for investment in the work, now in process, of industrialization in the north. There is need for the optimism which is so truly northern. There is need as well for

that conservative temper, and that ability to look clearly at facts, which should be the most important intellectual contribution which a scientific training may give. Canada is fortunate in the young men who are choosing the north as the place in which to make their contribution to Canadian progress.

So the old order changes. But, however much it may change, as change it will, more and more, there will always be found in the north by the discerning eye and the understanding heart an inner quality of calm steadfastness which speaks of the eternal. That quality nothing can efface.

Note. The pictures at Flin Flon, Sheritt-Gordon and Island Falls represent the situation as in July 1930. In some respects the North moves quickly. There is now an established industry in mining, metallurgy and power in that area which is one of the major contributions from northern Canada in recent years.—R. C. W.



Photograph by Jackson Hayward.

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Indian Pipe (Monotropa uniflora), also known as Corpse-plant and Wood-Snowdrop. This singular inhabitant of Canadian woods is perfectly white from root to flower. Instead of green leaves it has broad and pointed scales, clasping the thick stem, which is terminated by one snowywhite flower. The Indian Pipe is so extremely sensitive that a few minutes after it has been picked it turns to an unsightly colour, becoming perfectly black when dried. "You must seek it in its forest haunts, under the shade of beech and maple, where the soil is black and rich, and there, amongst decaying vegetables, grows this flower of silvery whiteness."

Down Digby Neck

By G. HAMILTON HATHEWAY

DON'T know what made us decide to do such an unusual thing as to walk "down the Neck." It may have been the charm of the phrase; we had never walked down a neck and perhaps saw ourselves as microscopic human beings in a Canadian Land of Lilliput, walking on a giant Gulliver stretched out a hundred miles and so profoundly

asleep that even projection into the frigid waters of the Bay of Fundy could not disturb his pleasant dreams.

We were both inclined to activity—but never, so far, had our idea of good times extended to include the serious use of our own feet. They told us at Digby, where we landed after a jolly two hours' steamer trip from Saint John, that there was a daily stage for the run down the Neck, and a good road though hilly. We saw the vehicle. We looked at each other. "We might walk!" we said; and at last we said, "Why not walk?"

Sending our baggage on by the stage, we retained only what could be carried in rather capacious coat pockets, such things as are essential to the night's repose and the morning's self-respect. "There'll be houses along the way," they told us, entering in with our plans, "and you'll have only a night or two to spend. . . ." We set out the next

morning.

It was a lovely, peaceful day in early summer, blue of sky, green of field and tree, red of clayey earth, and ultramarine of sparkling Fundy. The road was hilly, very; it upped and downed and round-abouted in an enchantingly whimsical way, as who should say — or rather, sing —"Hi-o, the world is wide, and I love life whate'er betide!" It was that kind of a road, wandering and happy and irresponsible.

The Neck is really a thumb; if Nova Scotia is a mitten (for the moment) the

thumb of the mitten is this strip of land, running along the northern coast with its tip pointing at the State of Maine. Between the thumb and the hand runs an inlet called St. Mary's Bay. The Neck lies therefore between St. Mary's Bay on the left as you walk to the tip, and the Bay of Fundy on your right, and is only a mile or so wide.

We knocked at the doors of half a dozen farmhouses on Digby Neck, and at each found cheery welcome, hospitality, immaculate cleanliness, and good food; at one of them we spent the night, and it was about noon of our second day that we suddenly topped a hill. Not that we hadn't topped plenty of them before that one!

It had been getting a little warm — for though Nova Scotia nights are cool in summer, the sun can be searching at high noon—and the hill had seemed just a trifle demanding in its steepness and unmitigated length. In fact, we had

perhaps got a little tired of walking and were a bit inclined to grumble and wish we had not been such asses. We could have hired a car just as well! Would have been there yesterday, instead of sweating up hill and down dale like two tramps. And think of the miles and miles ahead! And so on, and so on. Then we topped the hill; and there it was—enchantment at our feet!

It lies at the intersection of our road and a valley, which cuts across the Neck at right angles,—a little white cluster of houses and a spire or two, grouped about a horseshoe-shaped harbour. The road dips down into the valley, climbs up on the other side, and disappears straightaway over the hills on its journey to the end of the Neck. We stood looking down and to our left, at the cluster of whiteness in a trough of pure green; at the ridge encircling the harbour, like



G. HAMILTON HATHEWAY

is Associate Editor of "Country Life," New York. She is a New Brunswicker, and was educated at Oberlin and Bryn Mawr.



Miriam Hatheway Wood photograph.

The village on the St. Mary's side, with the mainland a faint strip six miles away. This picture is taken from the top of "Shubal," which looks down on "the ring with the solitaire pushed out."

a ring with the solitaire and its setting hill we stood on, sentinels at the harbour knocked out to let the sea in; at the two entrance. green-clad rounded bluffs as high as the

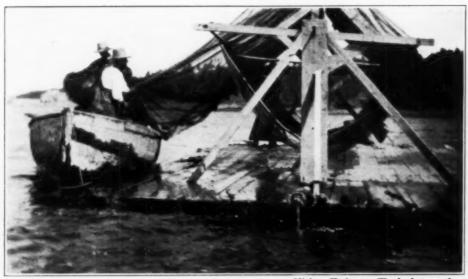
And then we raised our eyes to the

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Miriam Hatheway Wood photograph.

Nickerson's Point with the tide far out, but not by any means at lowest ebb. When it is "dead low" dulse may be gathered from the farthest rocks. The sand of the the dead tow date may be gathered from the farthest rocks. The said of the beach is even and fine and slopes to sandy flats which lie wet and shining under the hot sun. Along the top of the high bank spruce and fir and alders grow thickly, adding their spicy scents to the pungent air.



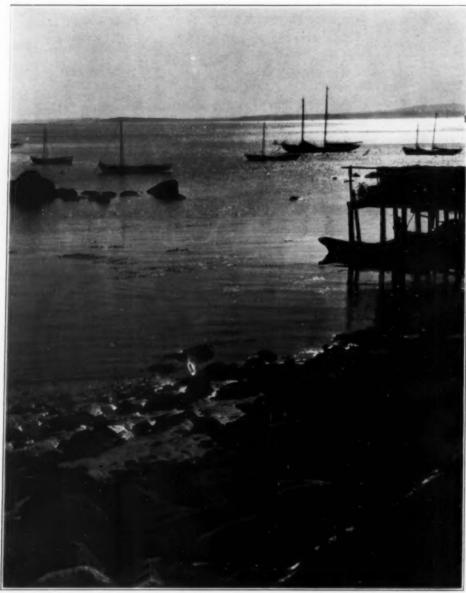
"Seining the nets" in St. Mary's Bay. This huge "reel" is a wooden frame-work on which the nets are dried after use. To see a catch of herring brought in with these nets is something to be remembered. Fish scales, like drops and splashes of silver, are everywhere; and thousands of slipping, shining fish in a great heap, as fishermen draw the net up to empty it into the waiting boat.

right and saw what would be Switzerland if it were winter; two great crags, wide apart on either side of the valley, towering hundreds of feet in the air,

with bare majestic rock faces glowing purplish red against the evergreens. Between and below them, a small lake served as mirror to its mighty guardians



Yawning out of the rock is the opening of a narrow cleft into which a boat may push for twice its length at low tide. Sea-weed hangs like thick tapestry on the rocky walls above us, and trails its fringes in the green water below.



Doris Conroe Day photograph.

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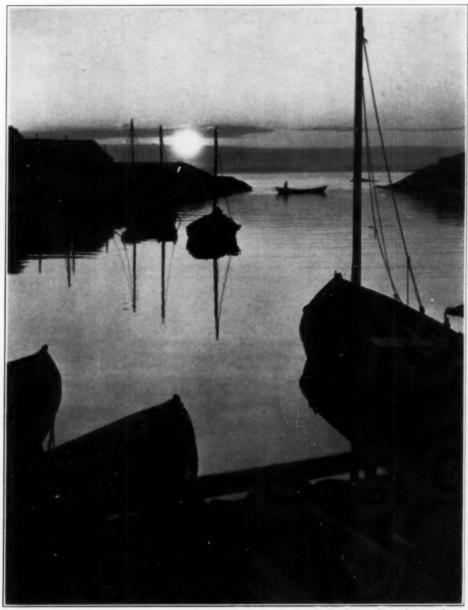
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"And such a tide as moving seems asleep,
Too full for sound or foam;
When that which drew from out the boundless deep
Turns again home."

and as a sort of shimmering link between the blue and sparkling Bay of Fundy away off to our right, and the narrow strip of glittering St. Mary's on our left. We breathed that out-going breath of amazement and delight which everyone knows who has expected something pleasant and found instead! something incomparably lovely.

In a sort of daze we discovered a house which served meals, and in a blissful semi-silence we dined. For some time the fiction was maintained that we were just passing through this place—

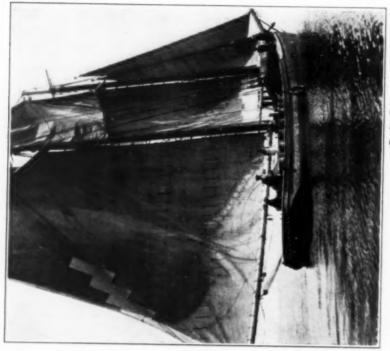


Doris Conroe Day photograph.

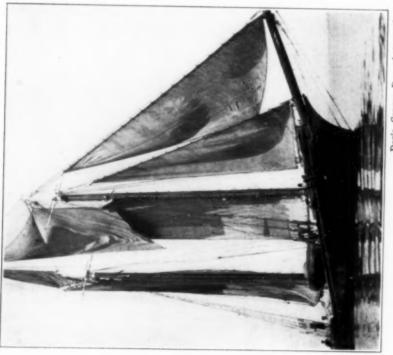
A quiet harbour after the long day's work.

though each was thinking, "I want to stay here". But in the end we stayed. We stayed a long time. The loveliness of it never wore thin. The mountains, David and Shubal, had the capacity for making a whole new arrangement of the landscape with each shift of one's standpoint. The lake reflected a kaleid-oscopic panorama of rocky crags, blue

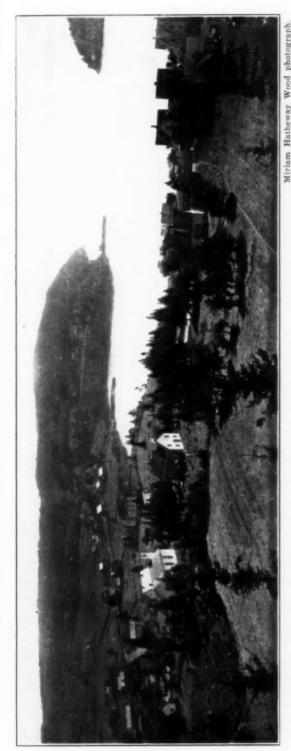
sky and fat white clouds—and developed water-lilies later in the season. The cove on the Fundy side, where we found board and lodging (at less than \$20.00 a week), was a marvel of smooth sand, sheltering rocks, and ice-green sea-water through which one could watch for hours at a time the slow-movie people who



When a breeze touches the big sails they fill slowly and swing on creaking boom to take the wind. In the picture a breath of air has caught the sails sufficiently to move them from stillness into action.



Most of these old-timers have auxiliary engines, but the romance of sailing-days still hangs in the canvas folds, and to see a well-built schooner "wing and wing" before the wind will stir the heart to dreams of adventure!



from St. Mary's Bay by the wooded headlands on either side. Approaching of rock until close to the entrance, which opens with unexpected beauty upon bour and the peaceful paradise of the village. of guarded f The village is well gr mouth one sees only

live on the bottom. Instead of motors, or even horses, there were oxen plodding dozily in the shafts of the farm carts. One could-and two didgo fishing at all times of night and day, with the fishermen of the cove. And there were picnics and chowder parties and beach fires, a good handful of pleasant summer people to meet and know, but plenty of coast-line also, so that when one wanted to be alone with the rocks and the lapping waves and the clean smell of salt water and seaweed, there was always ample opportunity.

Beside these joys of society, solitude, and scenery, there were mysteries! There were two mysteries: one, a challenge to lovers of detective yarns, an event which in its day was a newspaper headliner; the other, real witches.

The witches were a brother and sister, apparently hundreds of years old, who lived in a tiny cottage buried in trees, surrounded with lichencovered rocks over which forever climbed and slipped two blind and ancient grey geese. Benny carried a wand, a clean slender rod, with which he believed he "witched" the passing ships and brought them to disaster on the rocky coast. Leafy, his aged sister, wearing a patchwork skirt, a kerchief on her head, and shoes, but no stockings, crouched over a pot in the sooty fireplace, the rags she wore merely another shadow beside the red embers of her fire. Her eyes were dark and shining and deep-set; her nose and chin on the way to meet. - the classic witch



Doris Conroe Day photograph.

Here are leisure, calm and laziness!

profile. The fireplace and chimney, well-constructed of stones stuck together with clay from the beach, Leafy had built with her own hands. Benny's place was opposite his sister; and there the two would sit, the red glow casting wavering caricatures of them, each smoking a pipe and leaning forward occasionally to spit into the fire. They had been well born people, of an English family; and through all their mask of

dirt and decay, the fineness of breeding showed in their features and in their manner. beş Fa

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She and he hated strangers, looking sidewise and shrinkingly at us. Gradually, however, and because of their faith in the friend who guided us to this witches' house-in-the-woods, they allowed us to come in. Later, when we left, and their good angel had given them the provisions which made their lives possible and furnished an excuse for our visit, Benny came down to the tiny beach with us to help push out our boat. He levelled his wand at a tramp steamer plowing slowly along on the Fundy horizon: "I witch her," he whispered cunningly. "I bring her in! I finish her on the rocks!" We left him silhouetted against the sky, muttering and mumbling and holding his magic wand at a level with his eyes.

We awoke one morning to the excited realization that it was this very day we were to have our first experience of line fishing.

Line fishermen go out in a dory, row half-a-mile off shore and cast anchor over "the rock", a sunken reef where at certain times of tide cod and pollock may be caught. Here the tide is so strong that the cod-line trembles with its force, and many a hopeful jerk the



An interesting feature of farm life is the use of oxen to hoist, by means of block and tackle, the loads of hay into the top loft of the barn. The hoisting rope may be seen stretched taut as the ox is urged forward.

beginner gives only to find that Father Neptune and not old Tommy Cod was tugging!

Our host saw to our hooks and bait, gave us directions as to the proper way to hold the line (which was wound about a sort of flat spool that lay in the bottom of the boat), showed us how to throw the baited hook and sinker, letting the line run out between the thumb and fore-finger. "Hold it easy, and keep moving it up and down, up and down a little,- like this' Over an hour we spent, that seemed only ten minutes, learning to know the "feel" of the line, to distinguish between a "nibble" and a "bite", and all the while drawing full breaths of the salt invigorating air of Fundy.

One's very heart seemed to follow the baited hook as it was flung out, and one waited with held breath for a bite. Was that one? "Oh! I've got one now!" "Pull in, pull in,—hand over hand,

now, so's not to tangle your line—" Madly we hauled in, against such a strong resistance that we thought we had a big one. Up came the sinker at last,—but strangely light; the hook; no fish,—and no bait. "They're foxy fellers," said our host baiting our line afresh, "gives only a gentle little bite the cod does; you'd scarce know he was on. Ye want to jerk up quick at the first nibble."



Doris Conroe Day photograph.

A local man of the sea "caught" unsuspectingly by the camera.

Again we watched the line run out, felt it tauten, then loosen as the sinker reached bottom, pulled in a little to lift it a few feet, let it lie over the finger, moved it slightly up and down, up and down. . . Then a nibble,—a bite! Quick, a jerk,—then a steady pull, steady,—haul in! Can it be only the tide again? Ah! There was a gleam of silver, a pale curve beneath the surface.



The speck at the end of Nickerson's Point is Half Tide Rock. The tide is about half way out, and the beautiful curve of the shore is clearly shown. A fisherman's boat may be seen, like another speck, leaving the cove.



Miriam Hatheway Wood photograph.

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A little way beyond this heap of tossed boulders is the gravelly cove where we land to find the path leading to the house of "the witches," Benny and Leafy. By sunlight there are in rocks and sea-weed marvellous purples, greens and ochres; by moonlight all is an eerie nocturne of grays and fathomless black.

"Haul him in steady, now", and our host bent down for the gaff. An instant later a fine fish spattered and flopped in the bottom of the dory. "He's a big one, isn't he?" "Yes, he'll weigh nigh onto 30 pound." And once on shore again, though ravenous for lunch, we had to stop at the fish-house to have

him weighed; and he really was 30 pounds and a little more. Truly a grandfather Tommy Cod!

One other morning our hostess appeared in the breakfast-room to announce a picnic supper for that evening. She made a pretty picture as she stood in her print gown, pink as her cheeks, the



Miriam Hatheway Wood photograph.

Clam-diggers. The sandy flats of St. Mary's Bay hide countless thousands of clams, and how good they are at a clam-bake on the shore! The clam-diggers make a group worthy of an artist; but it is back-breaking work, and a quick eye and hand are necessary to success.

colour of the wild roses that grew along the road. Her eyes were as blue as the morning, and her brown hair was covered with a lawn cap, for already she had been some hours at work. Her management of her household of summer people was as energetic as her marshalling of kindred spirits of the village amongst whom she had organized a literary club, whose frequent meetings in the winter helped to enliven the long evenings and keep the families in friendly touch with one another.

coffee,—all were so good in that zestful air, and all so quickly gone! When the dishes were rinsed and re-packed, we spread our rugs and cushions in a semicircle facing the Bay and the sunset and the heap of drift-logs, now beautifully built into a hollow square filled in with smaller sticks. A match flared, blue smoke rose, little magic flames leaped up and up. We sat watching them lengthen, watching the darkening water and the sky glorious yet with the afterglow; a circle of friends, summer



Miriam Hatheway Wood photograph.

A quiet curve of sand and gentle waves. Old Fundy can change her moods like any girl. Beyond the breakwater stretch 20 miles of rough coast to Digby, with no other sandy beach in all the distance, and but one or two other harbours or coves.

It was a privilege to share in the preparations for picnic festivities, to be allowed to learn the contents of various cupboards and drawers in the pantry or to sit at the kitchen table and follow directions for chopping and mixing.

In the late afternoon our group made its way down the road to the shore and "chowder rock." Our host, ever first in seeing to the comfort of his guests, led in the search for drift-wood, plentiful along this coast. Big and bigger logs were brought and piled ready for the evening bonfire; while by the time the baskets were unpacked a smaller fire was burning well for the coffee-pot.

Buttered biscuit, brown bread, fried chicken, jam sandwiches, doughnuts,

people and village people. The firelight touched one here and another there. Here was Aunt Lallie, frail and brave and witty, who read widely and well, and could talk with you of the politics of the day. There was Cap'n John, young and strong and tanned, his brown eves an odd contrast with his curly white hair. There was little Sally too. dreams of childhood and dreams of girlhood meeting in her shining gaze. Cousin Joan was here, known all along the Neck for her hospitality and her love of a good joke. Her black eyes flashed with fun, and could flash with anger too. Here was our host, gentle mannered, quiet, with the clear glance and quick, sure movements of those who, in the

days of wooden ships, had "followed the sea." Anxious, worn or tired faces, pale city faces, all were rested happy faces now in the glow of the bonfire. We listened to the soft crackling of the sparks, orange against the night; we smelled the sea-weed and the wood smoke and the cool salt air; we heard the sound of the tide. Someone turned to our host,—"Now won't you please tell us a story?" So he told us the story of the mystery man,—Jerome.

Sixty years ago there were fewer residents of the little village than there are now-a mere scatter of houses, and all inhabited by fishermen and sea captains. One morning, one of these fishermen arose at daybreak to take advantage of the tide, pulled on his tall boots, his heavy short coat, and his cap, and went down through the bleak dawn to the water to start the day's work. As he was about to turn toward his dory, he glanced at the beach and was amazed to see in the middle of the pale half-mile of sand, a dark object that looked like a man. He set down his bait-bucket and lines and ran to look. The object was a man-or what was left of one, for his legs were amputated at the knees and very recently. Young, perhaps 25 years of age, he had apparently been set ashore on that stretch of barren coast, alone, at night, with nothing but a keg of water and a box of ship's biscuit beside him; and here he lay huddled, muttering and moaning. The fisherman ran for help, and soon kindly hands carried the sufferer to a cottage.

Through his moaning but one word could be distinguished—the word Jerome. In all the 50 years of Jerome's subsequent life in Nova Scotia, no intelligible English passed his lips. His case was advertised in the papers far and wide, persons from every country in the world came to see him and wrote him letters, but he never spoke to anyone who questioned him. Sometimes he muttered words which were recognized as Russian; once, when startled, he exclaimed distinctly in English; once or twice he was seen to write on a stone—but he passed his hand quickly over the

words and obliterated them. That he could hear and understand was evident. and he had the appearance of a man of education and breeding, and the clothes he had worn when found were of fine quality. He could, apparently, talk if he wished. But he would say nothing: and lived at the expense of the government of Nova Scotia for half a century, speechless, without occupation, and without curiosity. He loved a warm temperature, and sat in the sun or close by the stove continually. At one time, persons in New York claimed that he was a brother of theirs who had run away when a boy; but they never came to claim him. The mystery remains unsolved. Who was Jerome? Was he the unwanted scion of some English family? An exiled Russian The pitiful victim of some noble? horrible revenge? We shall never know. He knew, but he chose to seal his lips rather than reveal the truth.

"Who would think to find such strange things in this quiet place? Witches and castaways!" someone exclaimed. "You'd never suppose this lovely peaceful village had such queer stories to tell."

"Man, dear! Any amounts of 'em." answered our host cheerily, rising to put another log on the fire, "any amounts of 'em." He had been whittling gently at a piece of driftwood as he told us the story of Jerome, and now a tiny ship lay discarded on the sand. I picked it up and put it in my pocket. It was finely cut, a single masted fishing boat. As it stands on the mantel of my library it brings back to me the mysterious Jerome, the curious unreality of the witches, the very smell of salt and clean rocks, the cries of gulls, and all the startling loveliness of that little village which we found when we topped the hill. But especially, in every plane and curve, the little ship holds inevitably the integrity and courage and spirit of the man who carved it. Some places are, like going to college, of priceless value because of the fellows you meet there, and so it was-and is-with this cove of Nova Scotia. Those people in whose house we lived—they don't grow just the other side of every hill.

INDEX FOR VOLUME III., JULY-DECEMBER, 1931

The index for Volume III., July to December, 1931, is now ready, and will be mailed to members upon application to the Publication Office, 610 Lagauchetiere St. W., Montreal.



Sunshine, shadow and a glimpse of the St. Lawrence from a Murray Bay hill.



A sudden turn in the bob-sleigh run reveals an enchanting glimpse of the St. Lawrence River.



PLAYER'S

H Editor's Note Book

Through a regrettable misunderstanding the titles of two pictures, of Water Lilies and Indian Pipe respectively, became transposed and the Indian Pipe note was printed with the picture of Water Lilies on page 175 of the September number.

The following is the note that should have appeared under the picture:—

Sweet Scented Water Lily (Nymphaea odorata), of which it is said in the "Calendar of Flowers":—

Rocked gently there, the beautiful Nymphaea

Pillows her bright head.

"Who", says Catharine Parr Traill, in her "Studies of Plant Life in Canada", "that has ever floated upon one of our calm inland lakes, on a warm July or August day, but has been tempted, at the risk of upsetting the frail canoe, to put forth a hand to snatch one of those matchless ivory cups that rest in spotless purity upon the tranquil water, just rising and falling with the movement of the stream". The Chinese, it is said, grow Water Lilies for the sake of the nourishment yielded by the roots and seeds; and the large fleshy roots of the Yellow Water Lily have been used by some of the Indian tribes as food, and are said to resemble the Sweet Potato.

A correspondent in Nova Scotia writes apropos of the note on Indian Pipe, "The Indian Pipe is not always pure white, but quite frequently lavender and sometimes pink, in Nova Scotia, where I have found and painted, it many times," The note in the Journal was based upon Mrs. Catherine Parr Traill's "Canadian Wild Flowers", which dealt specifically with the Indian Pipe as found in Ontario.

The same correspondent, referring to an article in the August number, says: "While discussing the very strange and wonderful water pictures by Marion MacMillan, I was reminded of a camping party on Long Lake many years ago. One gloriously still moonlight night we were floating idly in our canoe, drinking in the beauty of the scene, when I observed that the shoreline and its perfect reflection in the lake, together formed a giant arrow, and having my pad and pencil I then and there made a sketch of it, as something quite unique".

The celebration at Grand Portage, to which reference was made in the September number, took place on August 22nd. A large number of people, Americans and Canadians, representing various historical and geographical societies, came together there to commemorate the bicentenary of its discovery by La Verendrye. Grand Portage is off the beaten track. The nearest railways are at Fort William and Duluth, many miles away. It is even some distance from the highway connecting those two cities. It is in fact nothing but an Indian village, on the shores of that greatest of inland seas, Lake Superior. Not the least interesting of those who took part in the celebration was the group of Chippewa Indians, who wore their native dress in honour of the occasion. Their chief, a dignified old man with the face of a statesman, made an address in his native tongue, with the aid of a microphone, the proceedings being carried out in the open air on the site of the old fur trading post. Nothing, perhaps, could have marked more sharply the difference between the old days and the new than the sight of this fine old Chippewa, perhaps a des-cendant of one of those who met La Verendrye at Grand Portage, talking to a group of Americans and Canadians through a loud-speaker.



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you continuously and ask your good will and support. At this season will you not say "thank you" by using Christmas Seals and by remembering other welfare organizations in their appeals?

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J. Dewey Soper, special investigator for the North West Territories and Yukon Branch, Department of the Interior, returned recently from Baffin Island, which has been the scene of his explorations and research work, periodically since 1923. Two years ago he startled the ornithological world with his discovery, in Foxe Basin, of the breeding grounds of the Blue Goose. This gained him international fame, as scientists had for years puzzled over the whereabouts of the nesting place of the mysterious bird that winged its way as far south as the Gulf of Mexico in the fall and then, in the spring, vanished into the Arctic beyond Hudson Bay.

The Department of the Interior desiring further information on Baffin Island, which is Canada's largest island, Mr. Soper was sent forth on another expedition in the early summer of 1930; headquarters were established at Lake Harbour, on the south coast. During the year he surveyed a considerable portion of the coastal region, controlled

to a substantial degree by a precise system of triangulation over the hilly area about Lake Harbour. A large, previously unexplored river was also surveyed as far as Mt. Kenowaya, far in the interior. The stream occupies a valley 1,200 to 1,500 feet deep, which intersects a mountainous region with elevations over 2,000 feet in height. An extraordinary feature of the valley was the presence of willows over 12 feet in height. In the same locality a powerful waterfall was found with a sheer drop of 90 feet.

As in former years a detailed study was made by Mr. Soper of all species of mammals and birds in the region under review, conducted from both a purely scientific angle, and that of their economic relations to Eskimo life and welfare. Bird life is reported much scarcer than in regions earlier explored by him to the north-west. Sea mammals are fairly plentiful, but cariboo are decreasing at an alarming rate; in the Lake Harbour region they are nearly extinct.

Amongst the New Books

ORDERS AND INQUIRIES ABOUT BOOKS REVIEWED HERE SHOULD BE ADDRESSED TO THE BOOK PUBLISHERS

The Philippines Past and Present. By Dean C. Worcester. Toronto: The Macmillan Company of Canada. 1930. \$6.

This is a new, revised and enlarged edition of a standard work first published in 1914. It has been brought up to date by Ralston Hayden, who has added a biographical sketch of the man who was so closely identified with the recent history of the Philippines, and whose frank and forceful personality enters so largely into his story of Philippine affairs during the period of American rule. The book is mainly devoted to the development of the archipelago since its occupation in 1898, and the many intricate problems that had to be dealt with in reconciling the often conflicting interests of Filipino, Spaniard and American. Incidentally, however, one gets a very good idea of the land and its people. It is very fully illustrated, and is equipped with maps, a bibliography and an index.

Turkey in the World War. By Ahmed Emin. Published for the Carnegie Endowment for International Peace by Yale University Press. New Haven. 1930. \$3.25.

This is one of the volumes in the monumental work undertaken by the Carnegie Endowment, under the general title "Economic and Social History of the World War," and edited by Dr. James T. Shotwell. Written from the inside, by one who took an active part in the conflict on the Turkish side, the treatment is on the whole singularly clear and impartial. The book is divided into three parts: Turkey before the World War; The Actual War Period; The After Effects of the War. While the point of view is mainly historical, there is much that will be of interest to one who wishes to study Turkey from the viewpoint of economic geography. Of special interest is the last chapter, in which Ahmed Emin discusses the economic effects of the Nationalist movement in Turkey.

The Land and the Peasant in Rumania. By David Mitrany. Oxford: Oxford University Press. 1930.

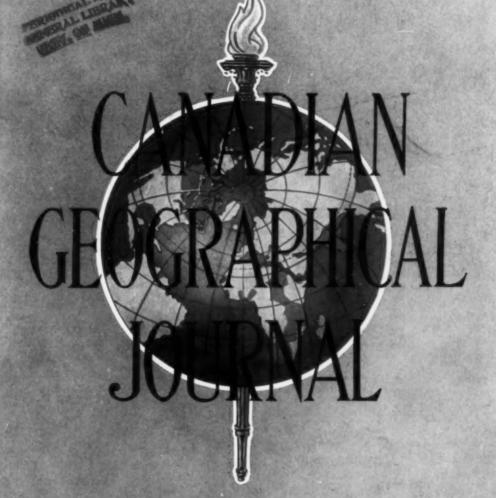
This is another volume in the Series of monographs being published for the Carnegie Endowment for International Peace under the general title Economic and Social History of the World War. It presents the problem of the Rumanian peasant as he is to-day, and as his destiny has been moulded by the events of the War. It is necessarily a study of deep human interest. As Dr. Shotwell says in the Editor's Preface, "The Rumanian peasant speaks for himself to the whole world, and his plea for social, economic and political justice is, in its very nature, a force which makes for peace." Some idea of Dr. Mitrany's plan may be got from the principal divisions of his study: the Agrarian Problem in Rumanian History, the New Land Reform, and the Application of the Reform and its Results. It is impracticable here to summarize either the reform or its results, but perhaps the author's view of the latter is expressed in a single sentence, "The makers of the reform builded better than they knew or willed."

Across Mongolian Plains. By Roy Chapman Andrews. Toronto: Mc-Clelland & Goodchild. 1931. \$1.

This is a reprint of the edition published some years ago, another volume in the Excellent Blue Ribbon series. It describes two journeys from Pekin to Urga, capital of Mongolia, city of the Living God, where men live much to-day as they did in the days of Kublai Khan. Mr. Andrews is Associate Curator of Mammals in the American Museum of Natural History, and the purpose of his expedition was to round out the Museum's collections of Mongolian mammals and birds. This took him far afield on the plains and in the forests of Mongolia, and we learn much about the habits and characteristics of its two-footed and four-footed inhabitants, as well as of the engaging qualities of the Mongols.

DECEMBER, 1931

VOL. III., No. 6



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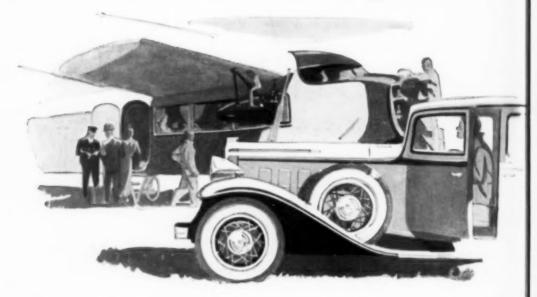
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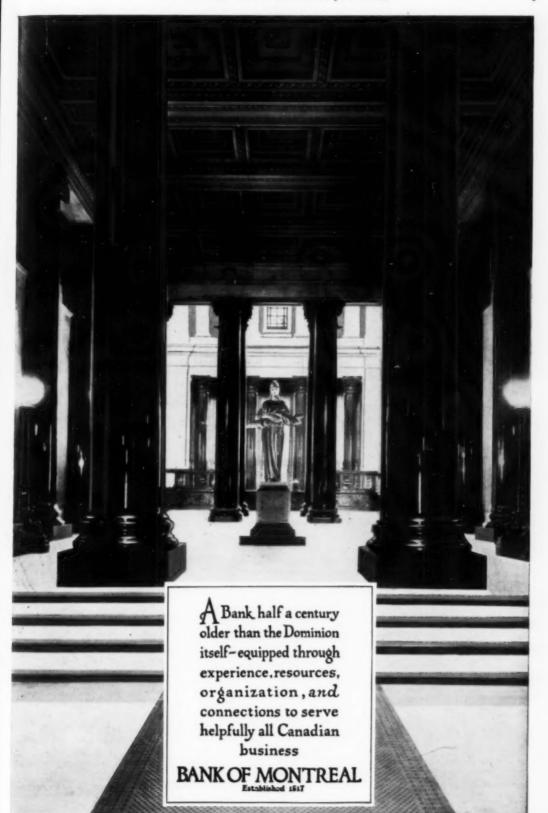
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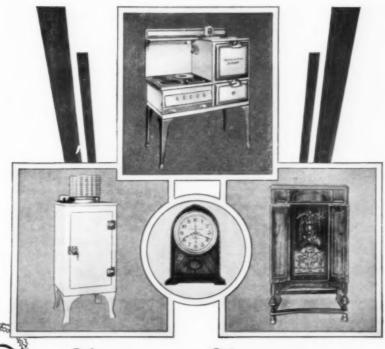
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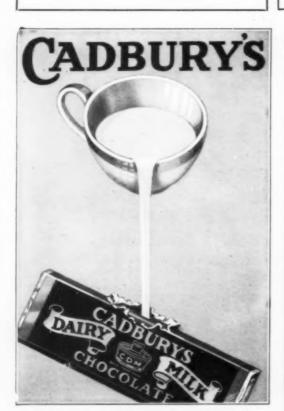
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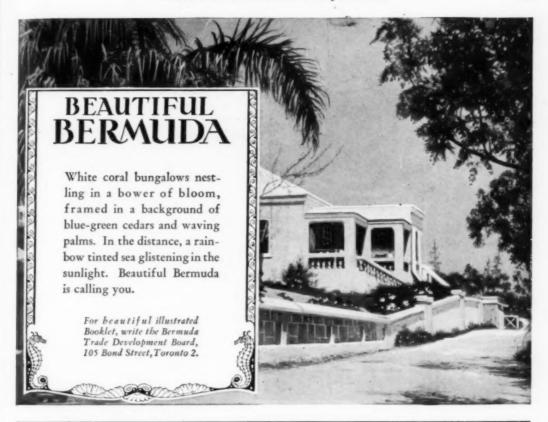


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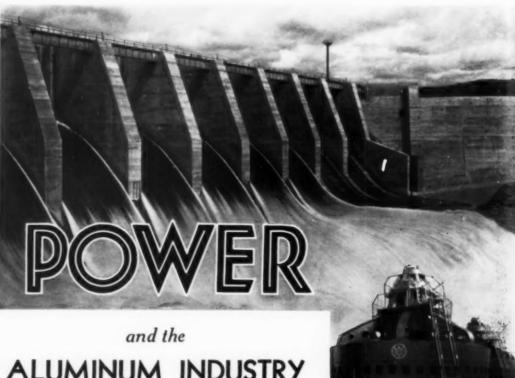
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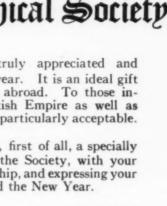
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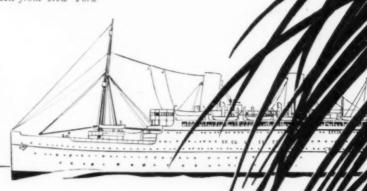
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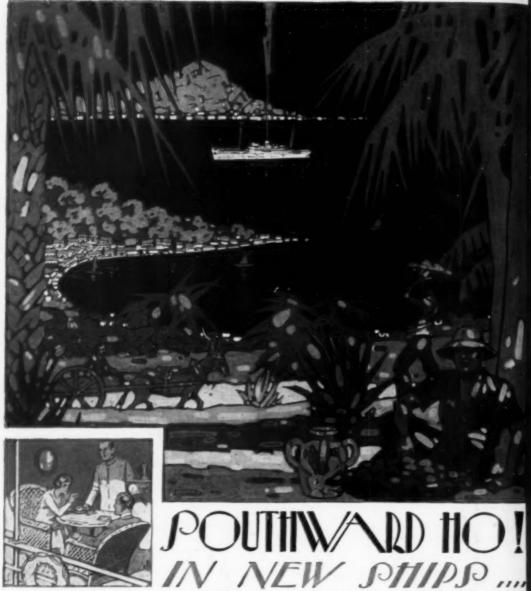
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